15128809760

This Book belongs
to the
Library
of
The Bath United Hospital.
Shelf 30 No. 1350

THE

DUTIES

OF A

REGIMENTAL SURGEON

CONSIDERED:

WITH

OBSERVATIONS

ON HIS

GENERAL QUALIFICATIONS;

AND HINTS RELATIVE TO A

MORE RESPECTABLE PRACTICE,

AND

BETTER REGULATION OF THAT DEPARTMENT.

Wherein are interſperſed many Medical Anecdotes, and Subjects diſcuſſed, equally intereſting to every Practitioner.

By R. HAMILTON, M. D.

Of the Royal College of Phyſicians London; Member of the Medical and Phyſical Societies of Edinburgh; and of the Medical Society of London.

IN TWO VOLUMES.

THE SECOND EDITION, WITH ADDITIONS AND CORRECTIONS.

ATTAMEN ERRORES NON SUNT ARTIS, SED ARTIFICUM.—Newton.

VOL. I.

LONDON:

PRINTED BY GEORGE WOODFALL,

FOR T. N. LONGMAN, NO. 39, PATERNOSTER-ROW; AND J. JOHNSON, NO. 72, ST. PAUL'S CHURCH-YARD; AND P. FOSTER, IPSWICH.

DICAL LIBRARY
BATH
71084

DEDICATION.

To the Reverend JOHN CAMERON,

IN THE

COUNTY OF ANTRIM, IRELAND.

DEAR SIR,

THE first Edition of this Work was dedicated to a respectable Friend not unknown to you, who favoured me with his Confidence before my medical Studies commenced at an University. It was a Tribute I owed him for the Intimacy with which he honoured me, and I paid it with Pleasure. He is now no more; yet I shall long venerate the good Man's Name.*

I turn again to my native Land;---and it gratifies me not a little in having this Opportunity of inscribing the present Edition to you. By this I acknowledge and renew our former Friendship, and

* Rev. Mr. Smith, Brother to the late Lieutenant General Smith.

assure you of the Esteem in which I have ever held your Character.

Your Acquaintance with me was even prior to his whose Death I lament; and the mutual Confidence in which we lived, was no less compleat.

Our early Attachments we remember with Satisfaction; they afford us some of our most pleasing Reflections; and whenever they occur, the pausing Mind dwells on them with peculiar Delight. This I have felt as often as the Time to which I allude recurred on my Recollection.

A Similarity of Taste, in Spite of the Disparity of our Years, drew me strongly towards you while I was yet young; and by our continued Intimacy, and the reciprocal Communication of Ideas, the Culture of my Mind was improved, and my Understanding modelled to more Perfection. For you pointed out to me the Path to Science, and by your own Example, kindled in my young Breast an Ardour for the Study Nature, and a Spirit of Enquiry into general Philosophy, which, however small my Progress may be therein, has never to this hour diminished.

Nay

Nay, it was even then I first turned my Attention to the Study of Medicine as a Profession; and my first rude Essay in exploring the component Parts of Animal Bodies, was in some Measure attempted under your Direction. For though no Adept in Anatomy, as being little connected with the Duties of your Station, yet you encouraged my Research.*

Had I no other Motive whatever than this to prompt me, small as it may appear, it would form no improper one for placing your Name at the Head of some Part of my Labours in a Branch of Science thus begun under your Auspices.

That you may live long and happy is the earnest Hope, and sincere Wish of him who now publickly subscribes himself your Friend, and who always respected your eminent Virtues.

I remain,

Dear Sir,

With Esteem,

Your's, &c.

R. HAMILTON.

Ipswich, June 24, 1794.

* This alludes to the Dissection of a Dog. After reading Keil's Anatomy, and Lewenhöek's Works, with which he furnished me, I was stimulated to attempt a Dissection.

PREFACE.

A VARIETY of uſeful, and intereſting treatiſes have been written, eſpecially within theſe laſt fifty years, on military medical practice, wherein moſt of the diſeaſes incident to troops have been minutely deſcribed and judicious plans laid down, both for their prevention and cure; but no author has hitherto pointed out, in a more particular manner, *The Duties of the Regimental Surgeon*, or taken up the ſubject in the light in which it is here ſet forth.

If novelty, therefore, be any recommendation, the following work has this to plead in its favour: but we hope it has more; its object is utility, while it inculcates humanity towards a claſs of men, whoſe ſituation, at beſt, is but uncomfortable, and yet to whom the community

community are under obligations.---I mean the *Soldiery*.---At the ſame time a review is taken of the general *Character* and *Conduct* of the regimental ſurgeon, as well with reſpect to the accompliſhment of this, as to his own more comfortable ſituation.

If the author has ſometimes in purſuing his ſubject, ſpoken freely, it is not with a deſign to caſt obloquy on individuals, but thro' an ardent wiſh, that the regimental ſurgeon may become more reſpectable, and to attempt a reformation in ſeveral parts, where, perhaps, the military medical name has, in a general ſenſe, been too juſtly expoſed to cenſure.

Altho' ſeveral eminent men have been,* and are in the ſervice in the ſtation of regimental ſurgeons, who previous to their engaging in the army practice, have with credit to themſelves, and to the univerſities wherein they re-

* Among theſe we may mention Profeſſor Home of Edinburgh, the late Dr. Steedman, and Dr. Warburton of ditto, and many others, whoſe names reflect credit on the ſtation.

cieved their medical education, arrived at the higheſt rank in the ſcience of medicine, which the ſchools can confer; yet it is a truth too well known to be denied, that many more have, and do daily find their way into it thro' *intereſt* and mis-applied *recommendation*, whoſe opportunities of qualifying themſelves to undertake ſo important an office, have been *almoſt* none, or, at beſt, extremely limited.

It is not of the well-informed medical practitioner, ſuch as are alluded to above; but of *theſe*, I am chiefly to be underſtood as applying my remarks in the following work, who, young and inexperienced in the profeſſion in which they are engaged, and without that foundation to build on, which it behoved them to poſſeſs, may think too lightly of the duties of their ſtation, and of medical practice, becauſe they have not been taught *how* to eſtimate it juſtly, or take thoſe advantages of diſeaſe, that a more liberal education would have put in their power.

To

To regulate health, and to attempt the removal of diſeaſe is, ſurely, a matter of the higheſt moment to ſociety. The lives of his fellow creatures are unlimitedly placed in the hands of the medical practitioner, and a confidence repoſed in him by the public, too often on his own word, and without ſufficient teſtimonials of his qualifications from thoſe capable of judging, which in the moſt trivial branch of employment in common concerns would be denied the pretender, till ſpecimens of his abilities had been previouſly examined, and a proper eſtimate formed how far he was initiated in the principles of the branch he propoſes to follow.

Does any man truſt a perſon who calls himſelf a *taylor*, a *ſhoemaker*, a *carpenter*, &c. &c. to make him a coat, a pair of ſhoes, a door for his houſe, &c. without firſt having known ſomething of his capacity in the buſineſs in which he means to employ him? ---Before the carpenter can ſet up for himſelf in his buſineſs, cuſtom ordains, and the laws give it

coun-

countenance, that he ſhall be regularly bred to the trade, and a ſpecified term of years, is for the moſt part, fixed to be allowed him for this end; ſhort of which is not thought competent for obtaining a proper ſkill in the handy-craft, to give him pretenſions to the name he would aſſume.

Is it not ſtrange, that the ſame pains ſhould not be equally exerted in a matter of ſuch magnitude as the employment of medical practitioners?---The one at moſt can only ſpoil you a piece of labour, and coſt you nothing but its price, which your purſe may eaſily afford to repair, while the unqualified man, who uſurps the medical character, and incautiouſly deals out his drugs, poiſonswhen unſkilfully applied, *may*, nay often, we fear, *does*, rob you of the life of your deareſt concerns, your friend's, your child's, your wife's, or perhaps your own, for ever beyond the power of reparation.---Such is a melancholy picture of our credulity, in theſe nations; but ſuch is truth!

The

The innumerable ſwarms of quacks, and medicaſters, which, to the diſgrace of the laws of Great Britain and Ireland, beyond all other civilized and poliſhed nations, that daily abound, clearly evince, the above reflection, ſevere as it may ſeem, is but too well founded.* ---The noſtrums ſold in every ſhop, and puffed off in every newſpaper; the empyrics that daily ſtand in our ſtreets, and infeſt the neighbourhood with the moſt barefaced aſſurance, deluding the incautious and credulous multitude, robbing them of that which ſhould buy them food and clothes, and promiſing them health, which they cannot beſtow; and which a little time proves, that their impudence, and their deſign to cheat, were the ſole motives by which they were actuated.--- Let theſe, I ſay, ſtand forth, and declare how far the remark is founded in juſtice!

* While I am writing this, one of theſe Impoſters ſtands in our ſtreets, raiſing large contributions on the credulous multitude. Let truth, and his works ſpeak his Eulogium.

It was the ſerious conſideration of this ſubject; I mean, the importance of the truſt repoſed in the medical character, whether in a ſettled ſituation, or in the leſs ſtationary condition of a military practitioner, that firſt gave riſe to the remarks contained in the following pages. Several of them, there is reaſon to fear, are not more applicable to the army practice, than to many ſettled practitioners, loaded with the miſplaced confidence of the public, in various towns and villages throughout theſe kingdoms.

The obſervations I have ventured to make on that which is the chief purport of this publication, are drawn from minute attention to the ſubject. For my ſituation unavoidably afforded me many opportunities, notwithſtanding my ſtation was confined, and my ſervices limited to a few years only during the late war.

Whether I have ſpent my time well, or otherwiſe, in collecting them, the public muſt judge. This I can with the utmoſt vera-

city declare, whatever may be their reception, that my aim was *utility*, and my principal motive, the good of thoſe for whom I have taken up my pen.

It will appear to the reader that conſiderable pains have been taken in the courſe of my illuſtrations, to interſperſe it with medical anecdotes, &c. as well to render it, in ſome degree, fit for the peruſal of other practitioners beſides thoſe of the army, as to explain more fully the different ſubjects which offered themſelves to my conſideration.

It may alſo appear to ſome, that I have often dwelt too long on minutiæ; but they will pleaſe to obſerve, that what may ſeem trifling to the ſettled practitioner, may be matter of much importance to the regimental ſurgeon; there is no occaſion to illuſtrate this at preſent; it will be evident to the reader when he conſiders the regimental ſurgeons ſituation, and if he can but for a moment ſuppoſe himſelf in it.

I have endeavoured to ſhow, that the regimental practice partakes almoſt *entirely* of that

that which is allotted to the phyſician; hence will appear the propriety of inculcating to him the neceſſity of a liberal education to diſcharge his duty with *fidelity*, nay, with *innocence*, and without *criminality*. I have treated pretty fully and freely on the ſubject of intoxication. For this I hope I cannot incur cenſure, when the daily conviviality of a military life is conſidered, and the danger then of adminiſtering medicines, ſhould ſome unguarded hour of hilarity induce this condition.

My cautions on the careful doſing of medicines may in like manner be thought ſuperfluous; but I would hope, that on reflection, it will not only eſcape condemnation, but be thought a proper ſubject to be handled in a work of this nature.

The utility of experiments when conducted with care and prudence, muſt be obvious to every one; and I flatter myſelf no apology will be thought neceſſary for inculcating an attention to this part of the practice of medicine. What I have ſaid relative to the medi-

cines

cines to be kept in the medicine cheſt, may be conſidered as more exceptionable: I confeſs it is far from perfect; but I have given a ſketch of ſuch as I have, from time to time, uſed, or which I ſhould have had recourſe to, if they had been in my poſſeſſion; for it is not always we are well provided. But for this imperfection, I muſt rely on the medical reader's candour to excuſe, and the army practitioner's ingenuity to ſupply.

ADVERTISEMENT.

ADVERTISEMENT.

IN this Edition I have made various additions, which I hope will be found of ſome importance: theſe would have been ſtill more numerous had my health at that time permitted. I truſt however it will be found that nothing material for the young army Surgeon's conſideration is omitted; and that there are ſeveral things alſo which the veteran in army practice need not diſdain to peruſe. In ſome parts I may appear prolix, and thus have rendered my obſervations leſs intereſting to the lovers of elegant compoſition. But I had rather be minute than defective; and I hope in this I ſhall eſcape the readers cenſure, when he perceives it is the young and inexperienced in military medical duties that my work is principally calculated to inſtruct.

Among other additions I have given a diſcription of a *Tournequette* lately improved, and brought into uſe. It may be, perhaps, more known and its application more common than I am aware of; there can be no harm, however, in laying it before the reader; he that is acquainted with it may paſs over this part of my ſubject: and ſuch as have not before ſeen this Inſtrument, will doubtleſs think it proper to provide themſelves with it, and recommended them, as I have ventured to do, as a part of a ſoldier's accoutrements on

actual

actual ſervice. I am of opinion regimental practice is capable of great improvement; but much cannot be done unleſs Government holds out better encouragement to thoſe engaged in this line.—The time, it is to be hoped, is not far diſtant when men in power will turn their attention to this ſubject, and while they demand a ſtrict performance of the duties of the office, will think it neceſſary to place the office itſelf in a more reſpectable point of view.

CONTENTS.

CONTENTS.

VOLUME. I.

CHAP. I.

INTRODUCTION. page 1.

CHAP. II.

OF THE DIFFICULTIES ATTENDING A REGIMENTAL SURGEON'S STATION. p. 11.

CHAP. III.

OF THE SURGEON'S QUALIFICATIONS; AND OF HIS TENDERNESS TO THE SICK SOLDIERY. p. 75.

CHAP. IV.

SURGEONS CAUTIONED AGAINST SPENDING TOO MUCH TIME IN AMUSEMENTS WITH THE OFFICERS, LEST THEY THEREBY NEGLECT THEIR DUTY; AND OF THE IMPROPRIETY OF GRANTING THEM DOUBLE COMMISSIONS. p. 110.

CHAP. V.

OF INTOXICATION.—OF ITS GREATER CRIMINALITY IN THE SURGEON THAN IN OTHERS OF THE CORPS. p. 125.

CHAP. VI.

OF THE MEDICINES, AND THEIR DOSES. p. 147.

CHAP. VII.

OF DISSECTIONS. p. 177

CHAP. VIII.

OF THE NECESSITY OF GOOD INSTRUMENTS —OF FIXABLE AIR.—AND OF ELECTRICITY IN REGIMENTAL PRACTICE. p. 202.

CHAP. IX.

CONTENTS.

CHAP. IX.

OF THE PERUSAL OF BOOKS, AND OF SOME WHICH SHOULD FORM PART OF HIS LIBRARY. p. 258.

CHAP. X.

THE UTILITY OF CULTIVATING THE ACQUAINTANCE OF MEDICAL MEN IN THE DIFFERENT QUARTERS; AND THE STUDY OF THE NATURE OF THE SOIL, AND QUALITIES OF THE WATER IN EACH, RECOMMENDED. p. 304.

THE

THE DUTIES

OF A

REGIMENTAL SURGEON,

CHAPTER I.

INTRODUCTION.

IT is an old remark, and, I fear, not the leſs true for its antiquity, that more men periſh in the regimental practice from the want of proper medical care, than by the ſword; or, in the words of an ingenious author, "More die there by the lancet, than "the lance."

If this be true, it is ſurely lamentable, and what concerns the ſtate not a little, ſince the reformation, if any is ever to take place, muſt, in a great meaſure, proceed from thence. New regulations muſt be made in the Surgical department, and better encouragement

held out for the performance of this part of the public ſervice to thoſe who engage in it.

It is with ſome degree of diffidence I venture to throw together a few thoughts on the ſubject. I wiſhed to have ſeen it undertaken by ſome other better qualified for the taſk; but, ſince none has yet appeared to plead the poor ſoldier's cauſe in this reſpect, I ſhall make the attempt. Others, perhaps, may be induced to follow the path, and turn their attention this way, whoſe abilities in ſtating, as well as opportunities of knowing facts, may juſtly give them pretenſions above me.

But it will ſtill be a ſufficient ſatisfaction, if I can become the agent, though in ever ſo humble a degree, or diſtant point of view, in removing a common evil, and producing ſome public good. The few years, however, I have ſerved in a military medical capacity have furniſhed me with ſome opportunities for obſervation on this head.

I would not wiſh in theſe remarks deſignedly to drop any expreſſion that could give offence to a ſingle individual. Far be ſuch a diſpoſition from me! at the ſame time, I ſhall point out with fidelity, and without fear, whatever appears to me capable of improvement,

provement, as far as my knowledge of the ſubject reaches. The ingenious and liberal-minded ſurgeon will applaud, not blame me. The approbation of men of this diſpoſition I ſhall always be ambitious to obtain.

Each regiment, as well militia as regulars, is allowed a ſurgeon, as he is termed, and ſurgeon's mate. Their buſineſs is to attend to the diſeaſes of the men at all times whenever it is judged neceſſary. For this ſervice the ſurgeon is allowed four ſhillings a day; the mate three and ſixpence. But, out of this are levied from them conſiderable duties: to pay theſe, daily ſtoppages are made, for ſuch is the cuſtom of the army: from the ſurgeon a ſhilling, and from the mate ſixpence a day. This makes their ſubſiſtence equal, ſo that each is limited to a guinea a week; and on this they muſt ſubſiſt as well as they can.

Theſe ſtoppages, however, amount to more than the duties, but the overplus, or clearings as they are called, are never regularly returned at the end of the year. Inſtead of this, it moſt commonly happens, that the clearings of the firſt year's ſervice are not paid till after the third, and ſometimes even

later. When they are moſt regularly remitted, it is never ſooner than after the ſecond year. The ſtoppages ſubſtracted from the ſurgeon's pay amount to about five guineas a year, and thoſe from the mate ſomewhat leſs. Some of theſe are for uſeful and laudable purpoſes, and are not to be regretted: others leſs ſo, and ſhould not exiſt *.

The ſurgeon and mate are exempted from all duty, as it is called, in the army; ſuch as mounting guard, attending court-martials, and ſuch like; their charge alone being confined to the ſick. They rank as regimental ſtaff-officers, and are conſidered as an appendage to the corps. In the line of actual ſubordination the ſurgeon ranks not only below the youngeſt enſign, but the quarter-maſter and adjutant; and the mate again below the ſurgeon.

The ſurgeon receives a commiſſion ſigned by the ſecretary at war, or, if abroad, by the commander in chief there, who has authority to grant it; the mate only a warrant ſigned by the colonel of the regiment into which he is about to enter. This ſubjects him

* I mean here the fees of clerks beyond their juſt poundage.

him to ſome inconveniences from which the ſurgeon is exempted by having his commiſſion from a ſuperior power. But of this we ſhall ſpeak hereafter.

The ſurgeon or the mate muſt be preſent at all regimental puniſhments, *i. e.* at all times when any of the privates are, for certain miſdemeanors, ſentenced to be flogged. Their buſineſs here is to watch the ſuffering delinquent attentively, and to order him from the halberts whenever he is thought in danger, whether the ſentence of the court-martial be altogether executed on him or not. In this the commanding-officer has it not in his power to controul him, if he thinks it expedient to aſſert this right of opinion and authority.

The ſurgeon and mate are obliged to attend field-days; their buſineſs in the field is to give aſſiſtance ſhould any accident take place. For it ſometimes happens that the men cut their hands with the flints on firing their muſkets; ſometimes with the bayonets, in the hurry of returning them in keeping their motions; and ſometimes over fatigue renders them unable to finiſh the exerciſes of

the day, and ſuch like ; when it becomes their buſineſs to ſee them taken care of.

Every regiment has an hoſpital for its ſick, provided a houſe for that purpoſe can be procured in the place where they are quartered. To defray the expence of this, government allows about thirty pounds ſterling per ann. in ſome regiments. I believe, indeed, this is the allowance in moſt. If there be any overplus, it is applied to the purchaſe of wine for the ſick, utenſils for the houſe, ſuch as diſhes, ſpoons, chamber-pots, &c. Out of this, ſixpence a day is alſo paid to a nurſe in ſome regiments, an indiſpenſably neceſſary ſervant for an hoſpital.

To ſupply medicines, each private pays a penny a month ; each non-commiſſioned officer a penny three farthings : the non-commiſſioned officers I call the drummers, corporals, and ſerjeants. At the late war eſtabliſhment this amounted to about eighty pounds nine ſhillings and ſixpence per annum in ſix hundred and thirty-ſix rank and file. The preſent peace eſtabliſhment reduces it in ſeveral regiments to about ten pounds *. The amount

* I am uncertain whether the peace eſtabliſhment of every regiment of foot be reduced to an equal ſtandard. As the full

amount per man, however, is the ſame, though the mode of collecting it has lately been changed. In the regulations of the army, printed in 1783, we find this alteration is made, viz. that in a regiment now, whoſe companies are at fifty men or under, ſeventy pounds a year is given to the ſurgeon in place of pence-money, and in regiments of a greater complement a proportionably larger ſum. Beſides this, when the regiment is encamped, government ſends him a cheſt of medicines as an addition to the medicine money.

The complement of many regiments in the late war among the regulars, was ſix hundred and thirty-ſix privates, forty-eight corporals, twenty-ſix drummers, and thirty-ſix ſerjeants; amounting in all to ſeven hundred and forty-ſix. With reſpect to the ſea ſervice I am entirely unacquainted; therefore, it is to be underſtood as exempted from any remarks in this eſſay *.

full complement in time of war was different in different regiments, the peace eſtabliſhment may be likewiſe different. In a regiment of 636 rank and file, with the non-commiſſioned already mentioned, the peace eſtabliſhment has reduced them to 400.

* It is to the foot ſervice I chiefly confine myſelf.

I ſhall now ſtate the number in the ſick report of a regiment of the above complement at one hundred men, one day with another. But we are to obſerve, it ſeldom happens that it is compleat. It is as frequently found with leſs than the half; and, perhaps, at an average, for twenty years, we might ſtate it at this. We are to remember, however, that out of this hundred men returned to the ſurgeon, not one half, one week with another, actually require any medical aſſiſtance whatever. For it is the mode of proceeding to put all that are found unfit for duty, whether they are ſick or not, into the ſurgeon's liſt. Such men being in the number of the regiment, and receiving pay, muſt be accounted for; and there is no other place to arrange them in daily returns to the commanding officer, or thoſe to the War-office, ſo convenient as this.

If, then, it be allowed, that, at an average, the complement of the regiment being compleat, as already mentioned, a ſurgeon has never more than fifty men to viſit daily, his fatigue cannot be ſo great, when at the ſame time we conſider, that even out of this number, cut fingers, and trifling blotches on the

legs,

legs, not to mention ſome that want ſhoes, and others that want other neceſſaries, form, perhaps, one third of them. But ſhould the regiment not be even half compleat, following the ſame proportion, his patients are reduced ſtill to one half leſs; ſo that at an average, they are not above twenty-five.

It will hence appear, that he has leiſure ſufficient to pay proper attention to the really ſick; to reflect on the nature of their diſeaſes; to weigh the ſymptoms; to turn over authors who have treated on the ſubject; to compare it in his mind with ſimilar caſes he has met with in his practice; to obſerve the exact effects of the medicines exhibited; and to change or continue them as the caſes may require.

Thoſe who attend the ſick in large hoſpitals, not only in general viſit a much greater number of ordinary houſe-patients daily, but over and above attend, perhaps, an extenſive private practice. It is the diſtance, for the moſt part, that our patients dwell from one another, that cauſes the fatigue of the profeſſion, not their number when placed under one roof, as in an hoſpital. Hence the ſurgeon of a regiment can have very little cauſe to complain of great fatigue, whoſe number of patients, by our calculation, which

is

is rather above than below par, are ſo few; and, if not in his hoſpital, are within the limits of a town, perhaps, comprized within the ſmall compaſs of a mile; but ſhould it be even three or four, to viſit them can never be ſaid to engroſs all his time; and, more eſpecially, when the duty is divided between him and the mate, on whom the greater ſhare of the buſineſs generally falls.

The reaſon why I have entered into this diſcuſſion, and pointed at the limited number of ſick in a regiment, will appear in another part of theſe obſervations, where it ſhall be our buſineſs to ſhew, in as clear a light as poſſible, that the appointment of mates is unneceſſary; and that, by a different regulation, wherein they ſhall be altogether excluded, the regimental practice may be better attended to; and not only ſo, but the office of a regimental ſurgeon gain more reſpectability.

CHAPTER II.

OF THE DIFFICULTIES ATTENDING A REGIMENTAL SURGEON'S STATION.

AFTER what has been premiſed, we ſhall now enquire a little into ſome difficulties which a regimental ſurgeon has to encounter in the right diſcharge of his duty. Theſe indeed we ſhall find by no means few, and if he be a man of a humane and tender diſpoſition, are ſuch as will cauſe him many hours of uneaſineſs and diſquietude.

For ſurely it is matter of great concern, and muſt preſs not a little on our feelings as men, to ſee a poor unhappy patient deſtitute frequently of almoſt every thing fit for his ſituation; deſtitute of a proper bed to lie on; deſtitute of lodgings properly ſuited to his preſent diſtreſs; deſtitute of proper food or cordials to ſupport nature in its languiſhing ſtate; and, in a word, deſtitute of almoſt every thing which he ought to have, which his preſent diſtreſs loudly calls for, and which are often abſolutely and indiſpenſably neceſſary for his recovery.

That this is no exaggerated deſcription will appear evident, when we conſider the houſes the ſoldiers are billeted on; and the manner in which they are often uſed in towns where the regiment is quartered, when hoſpitals cannot be hired.

The billets in England, and, I may add, in Scotland, are always in public-houſes; and the landlord never fails to look on the ſoldiery not only as a nuiſance, but as a great draw-back on the profits of his buſineſs. They are treated coldly, and frequently lodged poorly. The places allotted for them are generally ſome uninhabited garret or lumber-room, where the very air they are obliged to breathe is ſo vitiated, as, at firſt entrance, conſiderably to affect a perſon unaccuſtomed to it.

If the landlord has no garret, he has, perhaps, ſome backhouſe, where he erects a few dirty beds. Such places are ſet apart for the ſoldiers, becauſe fit for no other uſe. The clothes on their beds are frequently ſo ſcanty, and ſo much worn, as even in ſummer to be almoſt unfit to keep them warm, and ſhould it happen to be cold winter weather, altogether inſufficient. This often brings on catarrhal affections, and lays the foundation of other

more

more violent diſeaſes of the inflammatory kind, not unfrequently ending in death.

It muſt be obvious that this will affect the ſurgeon in his practice; for, we need not add, that while the cauſe exiſts, the diſeaſe muſt continue. The moſt judicious plans of practice may be laid down, but, under ſuch circumſtances, it will be next to impoſſible they can prove ſucceſsful.

That this is a true ſtate of the fact many a poor ſoldier can teſtify, and, on my profeſſional viſits to them, what I have too often had occaſion to lament: the more ſo, as it was not in my power, in this reſpect, to afford them relief. The truth is, that many a priſoner in his cell is better lodged than we find many of the ſoldiery in billets; yet will they ſeldom complain, if their ſituation be at all tolerable. If complaints, indeed, are made to their officers, redreſs, as far as can be had, is given. A meſſage is ſent to the billet-maſter to deſire him to change the billets of the ſoldiers ſo treated: or oblige the publicans to furniſh them with better accommodations; but this is ſeldom productive of much good: for ſhould the magiſtrate interpoſe, which ſometimes is the caſe, and the landlords be

reprimanded

reprimanded, perhaps fined, and thus compelled to give them better uſage, ill-nature generally takes place on both ſides; the landlord and his family ſtill prove haughty; the ſoldier retorts it by behaving improperly, and taking every ſtolen opportunity of committing miſdemeanors. Thus neither party is pleaſed. The landlord abuſes the ſoldier—the ſoldier the landlord. Thoſe neceſſaries with which he is obliged by law to furniſh the ſoldier, are not only given with reluctance, but are often of the worſt quality.

Their ſmall beer is what I have chiefly now in view; for on theſe, as well as many occaſions, it is generally vapid, and unfit to be drank. Hence it frequently becomes the cauſe of cholics, diarrhœas, and other complaints of the bowels, that prove not a little troubleſome to remove; and cannot be completely cured till the cauſe ceaſes, and a change is made in this article, which is not always in the power of the ſurgeon to accompliſh, and who can only attempt a remedy by a complaint to the officer, which as often fails of the end in view, as it obtains it.

We muſt acknowledge that the publicans are greatly oppreſſed, eſpecially in time of war,

war, by the military. It appears very unfair to burthen this claſs of his Majeſty's ſubjects with ſo heavy a tax, while all other deſcriptions of men are exempted, and while they at the ſame time pay their juſt proportion of the other taxes of the ſtate. I ſpeak here of Great Britain; it is different in Ireland; the diſtribution of billets there is more equal: private houſes as well as public are ſubject to them.

With reſpect to the publican, he ſurely has no profit by a ſoldier's cuſtom. Such as hold this plea, have built their reaſons on a wrong foundation. His pay, it is well known, is barely ſufficient to purchaſe him neceſſary food. Let me ſuppoſe each ſoldier ſpends three-pence daily in his landlord's houſe, which is half his full pay, even this is no equivalent for the trouble and expence he proves to him. I believe, however, it will be readily granted, this is a ſum no private ſoldier can afford to ſpend.

That ſoldiers frequently get drunk, I acknowledge; but this is not always at their own expence. They are often jobbing through the town, when not on duty; their wages for this is ſometimes a pot of beer, or

the

the like: this may or may not be at their billets, juſt as occaſion ſerves, or as the landlord has a job for them.

I remember to have heard a publican declare, that his ſoldiers (I have forgotten the number he had billeted on him) coſt him no leſs than thirty pounds ſterling a year in ſmall beer alone *. Let us ſtate it even at half, and it is ſtill a heavy tax; and when we conſider, that they are furniſhed with other neceſſaries likewiſe, it becomes a farther oppreſſion. This man kept a large inn. Small public-houſes are, however, proportionally burthened. In a country ſuch as near London, where fire-wood and coals are dear, the article of fire itſelf is no ſmall tax during the winter. This the ſoldier is allowed, and this he will have, if poſſible.

It has appeared to me ever ſince I knew any thing of the army and its cuſtoms, that there are other deſcriptions of men on whom

* I have been in inns in the Weſt of England where 52 ſoldiers, and ſome officers, were billeted on an innkeeper at once: not for a night, on a march, but for a continuance. If each of theſe was paid out, at 1s. a week, it would amount to 2l. 12s. weekly; but, from 1s. 3d. to 1s. 6d. is a more common price in thoſe parts, when ſoldiers provide themſelves. This is an enormous tax: it is, however, in times of war that publicans are ſo burthened with them.

whom juſtice would equally require ſoldiers to be billeted. The butcher and baker I have chiefly now in view. Theſe receive more of the ſoldier's pay than the publican: for the ſoldier *may* drink, but he *muſt* eat. It will not be an over rate if I ſay, a ſoldier's bread and butcher's meat ſtands him in two ſhillings and two-pence a week, *i. e.* half a pound of meat a day at two-pence, which amounts to one ſhillng and two-pence a week; and three halfpence a day for bread, which is ten-pence halfpenny. I might rate it at two ſhillings and four-pence a week. The price that the lower public-houſes board their ſoldiers at (for ſome do board them) is four-pence a day. This is much more than a publican gains by a ſoldier. If this be true, it follows, that butchers and bakers, having equal, if not ſuperior gains by the military, ſhould be equally ſubjected to the tax of billets.

But there are inconveniences yet remaining that attend ſoldiers always billeted in public-houſes, and obliged to live there: I mean the temptation to drink. We know, indeed, they will drink whether they dwell in public or private houſes; but in the former the

temptation is greater than in the latter; for, being ſo convenient, if they have a penny they will ſpend it in liquor, though they ſhould not poſſeſs another to buy them bread.

In a butcher's or a baker's houſe theſe temptations would be leſs; and another advantage, I apprehend, would follow: they would be leſs liable to contract debts. For though the military laws be ſo ſtrict as to oblige the commanding officer, on coming into new quarters, to ſend a drum round the town to cry down the men's credit, beyond a day's pay, and this on pain of being caſhiered if he neglects it, yet many of them find means to get more credit than they can diſcharge. The conſequence is, that on leaving the town they leave behind a bad name, and are the cauſe of bad uſage to thoſe that ſucceed them; but this is not all—this very thing is the cauſe of deſertion.

For ſhould their debts be diſcovered to the commanding officer, and they put on ſtoppages for the purpoſe of payment, the pittance they now receive being inſufficient to purchaſe them meat, they are, I may ſay,

forced to deſert; they cannot ſtarve; the cravings of nature muſt be ſatisfied.

But it is not the private alone that is the ſufferer by conſtantly living in a billet; the officer is in like manner ſubject to the ſame. He experiences many inconveniences from it: he muſt buy his food at almoſt double the ſum he would pay in a private family; for he muſt pay at the common rate of the traveller, who, it is well known, pays double the value of every article he needs, while on his journey. This is exactly the ſituation of the officer. If he is frugal, he will receive bad treatment; at leaſt neglect will be his lot; and ſhould he expend even double his ſubſiſtence, he will ſeldom receive from the maſter of an inn over civil treatment *.

In a private houſe he would, in a great meaſure, be exempted from this; his room or billet would, in all probability, be more commodious, and his board would ſtand him in conſiderably leſs, provided he choſe to eat at his billet. To a ſubaltern this is no ſmall

 conſideration.

* The publicans ſometimes tell the officer, that by his cuſtom they expect to be reimburſed for the expence and trouble of the ſoldiers billets: this I have myſelf been told.

conſideration. But I have dwelt long enough upon this head. I ſhall now return to the farther conſideration of the difficulties attending a ſurgeon's practice when the privates are in billets.

Let us ſuppoſe him to have ſeveral men ill of dangerous fevers, and no hoſpital to remove his patients to; for this really ſometimes is the caſe, from the great diſlike and averſion people in general have to let houſes for ſuch purpoſes.

When this happens, he muſt attend them at their billets. I have already pointed out the frequent inconvenience of theſe even to perſons in health: What, then, muſt they be in ſickneſs?—bad beyond deſcription. Perhaps the chief part of the cure conſiſts, in theſe caſes, in pure air. But the poor ſoldier is mounted up in a cloſe, foul, dark, garret. At other times again the billet is pervious to every blaſt. Extremes are equally bad. What can the ſurgeon do in ſuch a dilemma, with ſo powerful an opponent to his meaſures?—alas! but little. His preſcriptions may be judicious; his attention great; and his attendance regular; yet h:

will

will only have the mortification of ſeeing his advice fruſtrated, and his patient every hour ſinking, till death in a ſhort time cloſes the ſcene.

Were examples neceſſary to prove what is here advanced, I might quote ſeveral; but I ſhall content myſelf with hinting at one caſe only: here the patient's life was loſt from no other cauſe than the badneſs of his accommodations in his billet during a typhus, which at firſt did not put on a more than ordinary bad appearance; but every thing conſpired to render recovery impoſſible in the progreſs of the diſeaſe. It was in the unfavourable ſpring of 1782, ſome time before the appearance of the influenza which in May and June ſpread over the kingdom. I think it was in the month of March. The ſeaſon was extremely intemperate, and the billet among the worſt I ever ſaw. It was perfect mortar around his bed, which ſtuck to the feet the ſame as if in the ſtreets; and the room pervious both to wind and rain. In this ſort of apartment were ſeveral beds, occupied by the other ſoldiers. No change of billet could be procured; for no publican would receive a ſick man, for fear of contagion: neither, as yet,

could any one be prevailed on to let a houſe for the accommodation of the regimental ſick. After this poor man's death, and ſome other misfortunes of almoſt a ſimilar nature, when the commanding officer determined to have a houſe for an hoſpital, if it was to be purchaſed for money, and one was with difficulty procured, it was not better than the billets: even worſe than ſeveral of them. In all ſuch caſes the beſt medical treatment muſt ever be fruſtrated.

Another difficulty that the ſurgeon, perhaps, labours under, is the want of a good, careful, and tender nurſe. A very great deal depends on this ſervant. It is altogether impoſſible for the ſurgeon to be preſent with his patient on all occaſions, when he wants ſuch aſſiſtance as a nurſe-tender can give; and, was it even convenient, and he willing, he cannot be ſo uſeful in this reſpect as a nurſe. She ought to be with the patient on all occaſions, and almoſt conſtantly; ſince it is her duty to adminiſter both drink and medicines with care and punctuality; the laſt, at the exact times the ſurgeon orders them; for ſhould any neglect happen in the exhibition of the medicines, if not productive of worſe

effects,

effects, it may at leaſt retard the patient's recovery. Suppoſe them neither given in the quantity preſcribed, nor at proper intervals, the effects which the preſcriber expected may not follow; and ſhould the neglect be kept a ſecret from him, it may produce an unneceſſary change in the plan, to ſay no worſe, and in the end, perhaps, with no advantage, if not detriment to the patient. Every one much converſant with the ſick knows the inattention of the generality of nurſes, for ſometimes both his practice and reputation ſuffer by it.

Though I have mentioned here a female nurſe, in the army this is not always eaſily procured. Indeed a careful *orderly*, or man, appointed to this duty, will anſwer tolerably well; but he is to continue, not to be changed every week, or leſs, as is ſometimes done, ſince it takes ſome time to qualify him for the office. What in the army is ſtiled a nurſe, and has already in this work been ſo denominated, is more properly the houſekeeper: ſhe cooks and caters for all the patients in the hoſpital, makes drinks, and prepares other medicines that require culinary treatment. She ſhould have a command, and be allowed

an authority over the other *orderlies*, to keep them ſteady to their reſpective duties.

And, farther, with regard to the chamber-nurſes' or orderlies' duty: great attention is to be paid to the patient's calls of nature; he is not to be left to his own feeble efforts to riſe to the pot, &c. as I have too often ſeen the caſe; ſuch exertions in certain acute diſeaſes, not to mention the cold that he will catch, may be very detrimental to his recovery; or, through want of ability, he may wet, or otherwiſe dirty himſelf; all which, by the preſence and aſſiſtance of the orderly, will be prevented. Attention is likewiſe to be had even to the manner in which he lies in bed, whether he lies in an eaſy poſition or otherwiſe; attention to the ſtate of his tongue, I mean his mouth, lips, &c. to keep them moiſt, ſoft, and as clean as poſſible; if his teeth fur, or become encruſted, to wipe them frequently, and ſeveral other minutiæ of this nature, which the ſurgeon may give him in charge, and ought by no means to be neglected. And if, at the ſame time, he has bliſters open, or other ſores, either accidential, or made as an aſſiſtance to his recovery, attention to keep them well dreſſed, and as eaſy to his feelings

as poſſible; otherwiſe an irritation will be kept up, which may conſiderably diſturb the ſyſtem, not to be allayed till this cauſe is removed. For this is more the nurſe's than the ſurgeon's province, ſince it may not be in his power to viſit him above twice a day at moſt, while the nurſe or orderly is, or ought to be, conſtantly preſent, and from habit, and practice in ſuch ſort of attendance, which, to ſome, may ſeem "trifles light as air," but, in reality, are of great moment in the recovery of health, ſhe becomes far more expert in, and tender, than either the ſurgeon or others leſs accuſtomed to ſuch things generally are. Attention muſt likewiſe be paid to the ſleep which the patient gets, and its duration; whether ſound and refreſhing, or only a ſort of coma-vigil; whether with the eyes properly ſhut, or half open; attention to the ſtate of his intellects; whether his ideas be confuſed or clear, on his awaking from ſleep; with many things of this nature, abſolutely neceſſary for the ſurgeon to know, and for which he muſt entirely rely on the veracity and vigilant care of the nurſe: for an error here may be called an error in the firſt concoction, and may lead him aſtray in his ſubſequent

ſequent preſcriptions. It is from the relation he receives in this reſpect that he will, in a great meaſure, be guided, and either continue, or change his mode of proceeding, or from which he can form ſome prognoſtic of the future event.

Inſtead, however, of ſuch nurſes, or chamber attendants, the regulations of many regiments only allow what is termed an orderly man, *i. e.* a ſoldier from the ſame company with the patient. What attention can in general be expected from a clumſy, heedleſs ſoldier, ordered on a duty he greatly diſlikes from its nature, as well as from the confinement to which it ſubjects him? For the moſt part, he is only anxious for the expiration of the time he is obliged to remain on this duty, which is twenty-four hours, for he is often changed daily.

But ſuppoſe him poſſeſſed of feelings enough, and ready to do as far as lies in his power for his ſick comrade (I am ready to own I have found many deſerving the higheſt commendation here) that he is not only willing to attend to the directions given him, but ſeduloufly puts them in execution; and who, in a few days, might be tolerably well qualified

fied to anſwer the place of a female; yet his attendance is only a day. Next comes another, perhaps as brutiſh as this man was gentle and tender; into whoſe head all the men on earth could not inſtil a ſingle idea of the duty he is to diſcharge; or, at leaſt, who will pay no more regard, than if he did not comprehend it. It is well, indeed, that the continuance of this man is only for a day. But, alas! in the doubtful period of a fever, what changes for the worſe will a day produce, where bad attendance is given, or, perhaps, the patient altogether neglected; changes which the moſt judicious of the faculty may not afterwards be able to obviate!

Though the ſurgeon gives him charges, repeated charges, relative to what he is to do for the patient, and even with threats of puniſhment, if neglected, yet, as ſoon as he is gone, will this fellow either go about his own amuſement, or, if he finds any one to give him liquor, or poſſeſſes any money himſelf to purchaſe it, haſten to get drunk in the houſe (I ſpeak now of the ſick in their billets) never once, perhaps, thinking more of the patient till the ſurgeon's next viſit, or till he be relieved next day by a third man of the

ſame

ſame company, and ſo on, till the unfortunate ſufferer either dies, or nature gets the better of theſe obſtacles, and recovers him. Such is the attendance given the ſick in billets; the attendance in the regimental hoſpital, when under the ſame regulations, is oftentimes little better; and ſuch are the difficulties that oppoſe the ſurgeon's ſucceſsful practice!

Should he be detected in this neglect of duty, and ſent to the *black hole* *, what purpoſe does it ſerve? The next that comes, perhaps, acts little better; or, ſuppoſe the contrary, more miſchief has already been done the patient by the ſottiſh idleneſs of this man, than can afterwards be retrieved. Here the ſurgeon's character may be at ſtake, and his patient loſt; while he has not only this to lament, which every man of feeling and humanity will bewail, but the commanding officer, alſo, may blame him, when he little deſerves it. This, ſhould it happen, is heaping Pelion upon Oſſa, grievance upon grievance: and this, ſurely, is no ſmall misfortune under

* A place of confinement for ſlighter miſdemeanors in the army.

under which a regimental practitioner labours. Nay, if he wiſhes to diſcharge the duties of his profeſſion as an honeſt man, it is what muſt give him many hours of bitter regret, and ſad mortification.

Though I have painted the ſituation of billets in this unfavourable light, as what moſt generally happens, yet here, likewiſe, we find exceptions. Some of the publicans pay much greater regard to the ſoldiers billeted on them; and ſhould any of them fall ſick, act towards them with much tenderneſs and humanity. It is in this walk of life as in others; there are to be found in it a variety of diſpoſitions.

As far as my obſervations have yet reached in this way, the ſmall public-houſe keepers prove the moſt civil, and are the moſt tender to their ſoldiers. One reaſon I would give for it is, that the ſoldier and the people he is billeted with are more on a level in point of rank, and hence more familiarity takes place between them. Familiarity here does not, as the proverb has it, breed contempt; on the contrary, it foſters friendſhip, and a ſtrong attachment is frequently formed. Where this happens, the ſoldier lives as happily as

the

the people's circumſtances and the nature of the billet will afford; and he may be ſaid to "fare ſumptuouſly every day," when compared to many of his fellow ſoldiers. He eats out of the ſame diſh, and drinks out of the ſame cup with his landlord and family, and, often, at little or no expence.

Another reaſon I would aſſign is, that many of theſe people have ſons in the army; this again begets ſympathy; they are kind to the ſoldier in hopes it may be repaid to their children, in like manner, living at the mercy of others in ſome different part of his Majeſty's dominions. It is parental tenderneſs; it is piety; and may their wiſhes be fulfilled, and their ſons placed among people equally diſpoſed to hoſpitality and humanity!

How happy have I been on finding a ſick ſoldier quartered on ſuch a houſe, where the miſtreſs was his nurſe, and who cheerfully adminiſtered to his relief, as far as her little wealth would permit; nay, often, with an anxiety and affection ſimilar to a mother. Here my *orderly man* gave me no concern. My directions were never given to him, but to this good woman, who would never fail to put them in execution, either herſelf or

by ſome of her family; or when family affairs prevented, was ſuch a check on the *orderly*, by threatening a diſcovery if he neglected, as made him more ſteady in the performance of his duty.

Well compounded cordials, or ſome light food, properly prepared and fitted to the patient's condition, is frequently a great help to keep up his ſtrength, and aſſiſt in forwarding his cure. Can ſuch nurſes as we have been deſcribing under the name of *orderlies*, prepare any thing of this kind, ſuppoſing them to be furniſhed with the materials, which a ſtomach ſo diſordered, ſo weak, can either reliſh or digeſt? A pudding of any kind they know not how to make; for there is but little variety of cookery uſed among the privates. Even panada, or water-gruel, which require the leaſt ſkill in preparing of any food for the ſick, is truly but ill managed when left to an *orderly*'s cooking. In the greater number of billets, whatever of this ſort is neceſſary, he muſt prepare, or the patient muſt want it.

The entire want of cordials is another difficulty which oppoſes the ſurgeon's endeavours. I muſt not ſay he has it not always in his power to compoſe them for his patient; but

I may

I may ſay, he too ſeldom does compoſe them. I hint now at the uſe of wine. To ſpeak the truth, there is no fund for this purpoſe; and if cordials of any kind, attended with expence, are ordered, they muſt either be charged to the ſick man's account, or the ſurgeon muſt furniſh them out of the medicine-money. Out of this they undoubtedly ſhould come, if it will afford it:—but of this ſubject hereafter.

And with reſpect to wine, one of the beſt of all cordials, the fund out of which it is to be procured is ſo ſmall, that little can be afforded. We ſaid before, that in many regiments thirty pounds a year was the ſole allowance for hoſpital hire, for a nurſe, and for wine. The nurſe's (houſekeeper's) wages, if a female, which ſhould always be preferred, will abſorb nine pounds two ſhillings and ſixpence per annum of it; and the hoſpital,* with fire and utenſils (the hire muſt depend always on the place and conveniency of the houſe) will leave little of the remainder. Half a guinea a week I have known paid: it is true,

* In ſome towns the corporation furniſhes it free, and with coals alſo. It is ſo in Newcaſtle upon Tyne. This is a very rare occurrence.

true, we find it ſometimes cheaper, but this muſt ever depend on circumſtances.

A bottle or two of wine in ſome caſes proves of little ſervice. Many caſes have occurred in practice, where a bottle or two a day, perhaps, for more than a week's continuance, is too little an allowance. A bottle or two of wine in a low nervous, or in a putrid fever, may prove of no effect, when, perhaps, if continued, it might be the chief means to ſtop the progreſs of the diſeaſe; or, at leaſt, to enable the patient to bear up the better under it, by the ſupport it affords to the failing vis vitæ, and the tonic power and energy it conveys to the nervous ſyſtem. Yet, if the ſurgeon goes beyond three or four bottles in the courſe of as many weeks, if the fever and the indication for wine continue ſo long, he will ſeldom fail of receiving a *caution* to be ſparing in its uſe; and yet, as we have ſaid, the patient's life is frequently owing to the liberal, though judicious uſe of wine.

It is, not however, an uncommon thing, at leaſt in a regiment wherein I ſerved, for the captains to order wine, at their own expence, for the ſick men of their reſpective companies. In this, the gentlemen of this corps have great

merit. Perhaps there is not another in his Majeſty's ſervice, where humanity and attention to the welfare of the privates under their command are more conſpicuous; nor is there ſcarcely to be found a man of greater humanity and tenderneſs towards them than their lieutenant-colonel. Where ſuch a diſpoſition is found in a ſuperior officer, it has doubly happy effects, as the example is diffuſed among the inferior officers.* It is with great pleaſure I can bear this teſtimony with regard to the preſent officers that compoſe this corps. Thus far for the inconveniences ariſing from bad billets, both to the privates themſelves and to the ſurgeon.

We ſhall now enquire whether the regimental hoſpital be altogether free from inconveniences. That it is not, I know too well from experience. Were it always to continue in one place, the regulation of the hoſpital would be eaſy, and improvements might occaſionally be made; but this neither is, nor can be the caſe in a marching regiment. Their ſhort ſtay in one place ſubjects them to many inconveniences beſides this; but theſe ſhall be paſſed over, as foreign to our preſent purpoſe.

* Tenth regiment of foot.—1782.

purpoſe. Inconveniences indeed, unleſs they become very great hardſhips, are the expected lot of a ſoldier, and to which it is his duty to ſubmit.

But to return to our ſubject: let us now ſuppoſe a houſe is procured for an hoſpital, tolerably commodious. This however, is what ſeldom happens. For though it has happened in the preſent, it will be a thouſand to one, if it happens in the next quarters into which the regiment marches. If it be ſmall, our patients are crowded, and the half of our ſick cannot be admitted. I have ſeen it conſiſt only of two ſmall rooms, one above another, with the kitchen, which made the ground floor; and in each of theſe no fewer than twelve men, though the room did not meaſure above twelve feet by fifteen,* the place being almoſt one continued bed, without ſpaces between, inſtead of diſtinct beds. Into this crowded ſpot the worſt caſes only were ſent. Some chronic caſes, ſome acute fevers, puniſhed men with their backs ſuppurating, and emitting a ſmell intolerable even to people in health. For when an officer finds a man

* It is ſeldom ſo many ſick, however, are found at one time. The regiment was upwards of 600 ſtrong.

of the company unfit for his duty, whatever be the nature of his complaint, and takes it into his head to ſend him to the hoſpital, though it may be the moſt improper place poſſible for him, under the preſent regulations of the army, the ſurgeon muſt admit him, if it be inſiſted on; and we cannot at all times find officers capable of reaſoning medically. The reader may judge what comfort it muſt be to practice medicine here, and how prejudicial to the recovery of thoſe in acute diſeaſes, as well as dangerous to thoſe under chronic complaints. In this houſe, alſo, the ceiling was ſo low, that a man little above ſix feet high could but juſt ſtand upright under it: this made it ſtill worſe, from the greater confinement of the air.

Confined air itſelf is the cauſe not only of ſickneſs, but death among troops. The nature of confined air, and chiefly ſuch as has been frequently breathed without changing, is at this day ſo well underſtood, that barely to mention it is ſufficient. Thus ſays the judicious Pringle: "Among the cauſes of ſickneſs and "death in an army, the reader will little expect "that I ſhould rank what is intended for its "health and preſervation, the hoſpitals themſelves;

" ſelves; and that on account of the bad air " and other inconveniences attending them."*

On the other hand, if the houſe be penetrable to every ſhower, which regimental practitioners alſo but too often experience, even in ſummer, it is poor accommodation, and in winter intolerable; nay, ſometimes as bad as the worſt billet. The improvements we can make for the ſhort time we expect to occupy it, are either trifling, or none at all; for ſince a few months is the longeſt date we can promiſe ourſelves in the ſame quarters, the commanding officer has little encouragement to expend money, the good of which muſt be chiefly reaped by the proprietor.

I have ſeen the houſe ſometimes ſo ſmoky, that a fire, even in the the depth of winter, could not be kindled, without the patients being in danger of ſuffocation. On this account, it was even with ſome difficulty that victuals could be prepared for them. This was particularly the caſe at Tinmouth. When fevers were in the houſe, during the time of dreſſing meat, the ſick felt an uncommon uneaſineſs from the ſmoke, which was ſo

* See alſo a paper on the bad effects of confined air, in Med. Tranſ. vol. 3. by Sir Geo. Baker.

thick and groſs, that it could almoſt be felt. Under theſe complicated evils I was obliged to practice in one of the worſt fevers I have experienced in the army.

The want of a fire altogether to thoſe under ſome particular complaints not requiring confinement to bed, is a very chilly and cheerleſs circumſtance. It is ſcarcely tolerable to ſit without a fire in ſuch inclement weather as we often experience in the changeable climate of Great Britain. Here the nurſe, or houſekeeper, and the orderlies, are all diſcontented, and conſtantly murmuring, and laying their grievances before the ſurgeon. What can he do? He may regret the ſituation along with them, but he cannot change it; for, perhaps, there is not another houſe in the place that can be procured for the purpoſe.

In this ſituation, the houſe-patients whoſe complaints do not require them to be confined to bed, are under great temptations to drink, provided they have addreſs enough to procure liquor, and have wherewith to purchaſe it, without any regard to the nature of their complaints or the medicines they are taking. It is not, however, always they have their pay at their own management, as

when

when men are ſent into the hoſpital, their pay is put into the hands of the hoſpital ſerjeant, who markets for them. This is a wiſe regulation. Moſt of them, however, have followers, who take ſtolen opportunities to ſupply them with drink; for though a centinel be conſtantly planted before the door, to prevent them from leaving the houſe without the ſurgeon's permiſſion, and, at the ſame time, to keep improper perſons from entering, yet they, not unfrequently, find means to bribe him, who, for his ſhare of the ſpoil, will wink at what his duty ſtrictly bids him repreſs. Theſe evils are not, either by themſelves or the centinel, conſidered as of much magnitude; yet, to many patients, they are matter of great moment.

It frequently happens again, that what are called *maligners* are obliged to be received into the houſe, *i. e.* ſuch as are idle; who, in order to keep from duty, feign themſelves ſick. Such ought to be ſhewn no indulgence; but a ſtrict watch ſhould be held over all that are thus ſuſpected, and, if found out, proper puniſhment inflicted. Theſe, for the moſt part, are ſuch as prove irregular, and create more trouble in the hoſpital than all

the really ſick. But if the centinel permits them to wander out of the houſe, or liquor to be brought in, it is long before the impoſition can be diſcovered, though the ſurgeon be ever ſo vigilant. For, ſo great will be the conſpiracy among the patients, that they will not readily diſcover one another: like other conſpirators, however, they ſometimes quarrel among themſelves, when revenge dictates diſcoveries, and the truth at laſt comes to light.

This is a grievance, though it may be looked on by ſome, as of leſs conſequence than others we have mentioned: much of this ariſes from bad hoſpitals. Yet, after all, though the lazy and impoſing ſhould in this manner prove troubleſome, a ſoldier ſhould never be turned out on the invidious tale of another, or from a haſty fit of paſſion, leſt a man really unable to undergo the fatigues of his duty ſhould thence be ſubjected to it, at the hazard of his life. To blame my brethren here, might in me ſeem invidious, and I am unwilling to do it. 'Tis true, I have been told of ſerious errors of this nature, but none ever came immediately within my own knowledge. The adjutant of a certain regiment, a

man

man of ſtrict veracity, and who has ſerved moſt of his life in the army, related to me an inſtance of this kind, which happened ſome years previous to the late war. Two men came, it ſeems, into the hoſpital, one of whom the ſurgeon, after ſome ſlight examination, pronounced an impoſtor, and diſmiſſed him to duty; the other was admitted. It is probable he had received a hint that one of them was a *ſconcer*; but the conſequence was not ſo trivial—he miſtook the perſon—and received him whom he might have diſmiſſed without danger! it would have been more for his credit had he admitted both; for, like giving charity to an impoſtor, leſt we ſhould miſtake, and injure a deſerving object, it would have been better to have acted in a ſimilar manner, till a more proper opportunity had preſented to diſcover the cheat. The man rejected in this caſe, as it turned out, was then in a fever, of which he died. I would be far from ſaying, this was the cauſe of his death: he might have ſunk under the diſeaſe, even though admitted when he firſt deſired; but the ſurgeon was cenſurable in as far as it appeared, how little pains he took to inveſtigate his complaints. A man's behaviour

on

on theſe occaſions ſhould be judged of from his general character: if he has been any time in the regiment this is eaſily known. Some of the privates of good character will make it their boaſt, that they never miſſed a guard when it came to their turn; others never mount one but with reluctance, and, if poſſible, will find excuſes on their duty morning, and feign complaints to get themſelves reported ſick. A ſurgeon ſhould take ſome pains to know the characters of the privates. He will find his account in it. Nor is it ſo difficult a taſk under the ſtrict diſcipline of the army.

The nurſe, or houſekeeper, of the hoſpital in ſome regiments, is a woman; in others a ſoldier, to whom this office is allotted as his duty. Since a great part of the buſineſs this ſervant undertakes is to dreſs the patient's meat, to prepare drinks for the ſick, and to waſh for them (for they ſhould do this at a ſtipulated price) a woman is always to be preferred, where a choice can be made. Under her there muſt be one, if not more orderlies. I think, in general, there ought to be two: one to bring water, clean the houſe, and do other offices, more immediately about

the nurſe ; and the other to keep the patients rooms clean, carry them drinks, empty their pots, run little meſſages for them, and ſuch like. Beſides, in acute diſeaſes, when it may be thought expedient, to ſit all night by the patient : one can relieve the other by their ſitting up alternately. The nurſe may have the care of the medicines preſcribed, which are either to be adminiſtered by herſelf, or, under her inſpection, by the chamber-orderly.

It is ſuppoſed the hoſpital is furniſhed with a proper ſet of beds, ſheets, and bolſters of coarſe linen. With reſpect to its colour, it is a matter of little moment : therefore, whether they are brown or bleached linen is immaterial ; but that they be ſtrong, and cloſe in the texture, is more ſo. I would prefer chopped clean ſtraw to flocks, not only as being cheaper, but more wholeſome, eſpecially as the beds are ſo apt to get wet. The ſtraw can be eaſily changed for ſome other, freſh and dry, and almoſt without loſs of time : it is not ſo if they ſhould be filled with flocks. The reaſon is obvious why I adviſe the texture to be cloſe—leſt the ends of the ſtraw protruding through, might, by the ſharpneſs

ſharpneſs of its points, irritate the patient, and diſturb him. The bolſters ſhould be conſiderably wider than thoſe I have ſeen, and which, I believe, were of the common ſize. We know how advantageous it frequently proves, to have the patient's head well raiſed. For a regiment of the complement already mentioned, we ſhould not be provided with fewer than from twenty to twenty-five beds. Ten of theſe ſhould be ſmall beds for ſingle patients, viz. for thoſe in acute diſeaſes, or under other complaints, where a bed-fellow cannot be admitted; the reſt double, or ſo large as to allow room for two to ſleep together. From the ſmall and circumſcribed bounds of a regimental hoſpital, it is impoſſible, if we have many ſick, that all can have ſingle beds; and ſince we have always ſeveral in the houſe that ail very little, or whoſe ailments do not prevent them from admitting a partner, we may ſafely, and it will be œconomy to lay them in the ſame bed. Beſides, we ſhould always have three or four ſpare beds, either for new patients, or to ſupply the place of thoſe that may be wetted, or dirtied by the incapacity of the patient to manage himſelf, &c. I have ſometimes uſed

two

two in a day; for nothing is ſo prejudicial to recovery as a wet or damp bed. Some of theſe beds ſhould be ſet apart for flogged men; and theſe ſhould always be ſingle. I ſay, ſet apart, becauſe, from the blood, ſuppurated matter of their backs, and the oil, unguents, &c. applied to the wounds, the beds are ſo ſtained, and ſometimes hardened, as to be both unfit and unſeemly, to lay under a man with different complaints; ſo that, I think, it would be better to keep them ſolely for this uſe, with their blankets, ſheets, and pillows. Beſides, I have found ſome men who had a great averſion to them, merely from the uſe to which they had been applied. We need not fear they will lie by as uſeleſs lumber, unoccupied; we ſhall find but too frequent occaſion to uſe them, if the regiment be at all numerous. Every bed ſhould have two good blankets, and a coverlet. We ſhould guard thoſe who do not ail much, againſt colds: if the patients under acute complaints feel the clothes too weighty, it is eaſier to diminiſh than add, provided we be not furniſhed with a ſupply for this purpoſe. Theſe are conveniencies, however, we do not always find to this extent in an hoſpital; the

want

want of which may be ſome obſtacle to the ſurgeon in his ſucceſsful practice.

When a patient is ſo ill that it becomes neceſſary for one of the orderlies to ſit by him, he undertakes this duty under the nurſe's inſpection. She makes a report of his behaviour to the ſurgeon on his next viſit. This part of the diſcipline is commendable; and, provided it be properly adhered to, is a good regulation. But, I am ſorry to ſay, there are many abuſes here, and when this happens, it is a real grievance to the ſurgeon, who muſt rely on the reports he receives. We find theſe too frequently a matter of form, and, indeed, often falſe: this they do to ſcreen their inattention. They will anſwer yes, or no, to the queſtions aſked, juſt as it ſuits them, or as they think may pleaſe the ſurgeon; but if more minutely queſtioned, can give no ſatisfactory anſwers. Their falſe reports are worſe than none, ſince they may tend to miſlead the practice. He ſhould, therefore, truſt as little as poſſible to them, but endeavour to ſee, and examine every thing himſelf.

Another grievance which regimental ſurgeons often labour under, I cannot paſs over here, *i. e.* the murmurs of officers, if men

are

are not ſo ſoon cured of their complaints as their anxiety would have them. The length of time men are kept in the hoſpital, is commonly their topic when in converſation with the ſurgeon.

It is undoubtedly a laudable thing in an officer to pay a due attention to the privates he commands; to redreſs their grievances as far as poſſible, and to ſee that they are properly taken care of by thoſe whoſe province it is; but this, or rather a ſhew of it, may be carried to a degree very troubleſome, and far from commendable, reſpecting their medical treatment. I do not know what to term this:—it is not merit; yet ſomething like it. I ſhould be ſorry to blame them for any thing which ſhews their care of the ſoldiers, but this may, and, I verily believe, is, over done by ſome; and, I fear, ſometimes with little other view than to create the ſurgeon uneaſineſs. If he is found negligent, they ſurely cannot ſpur him too much; if diligent, and attentive to his duty in general, this is cruel, is reprehenſible and unjuſt. It is often more a mark of their want of judgment, than care of the ſoldiery. I have always found young officers, who knew but little of their own

duty

duty from their ſhort ſervice, moſt troubleſome in this reſpect. It would ſeem, that vanity leads ſuch to act ſo, as it ſhews their ſuperiority to the medical department in point of military rank, which ſeldom takes into conſideration either age, knowledge, or other qualifications. I am cautious, however, of blaming officers on this head; for, whether or not it proceeds from real tenderneſs, it is better than more culpable neglect. It is like negative virtue, or the ſhew of religion; if it be not real merit in the poſſeſſor, it is an example to others, and may produce good effects. Yet I muſt apologize to thoſe gentlemen, and candidly acknowledge, that ſuch, for the moſt part, are the regimental practitioners of phyſic, that too frequently fill this office, that it is not without cauſe this cuſtom prevails among officers—for a ſpur, not a curb, is often wanted.

We cannot expect to find officers poſſeſſing medical knowledge: this belongs not to their profeſſion; nor is a want of it in any ways derogatory from their merit as officers and good ſoldiers; yet I have often thought, that if commanding officers knew ſomething of phyſic, it would render them better judges

when the ſurgeon did, or did not, diſcharge his duty as he ought. But this is an impoſſibility, for many ſolid reaſons. If it could be found practicable, it would be frequently of ſervice both to the ſurgeon and his patients. He could explain the reaſons that retarded the cure, when the ſubject happened to be ſtarted, while the officer, on the other hand, would be the better qualified to guard againſt any impoſition. For, as things ſtand, the ſurgeon has it in his power to deceive his commanding officer if he be ſo diſpoſed, and thereby cover either his own ignorance, or neglect: and again, his commanding officer would not blame, where, perhaps, in place of cenſure, he deſerved praiſe. Theſe are alſo inconveniences attending a regimental ſurgeon; but this, in ſome ſort, may be ſaid to attend every medical man's practice, as well out of, as in the army.

The commanding officer has much in his power, both in the medical and diſciplinary walks. If the ſurgeon is a man of veracity, and otherwiſe diligent and informed in his duty, reſpecting the cure of diſeaſes, he ſhould allow him a great ſhare of his confidence. According to the preſent footing on which

ſurgeons in general ſtand, they cannot be of half the uſe they otherwiſe might prove. Their rank is too low to give them conſequence; and, as was ſaid above, rank alone is all in all in the army.

It is the opinion of a military author, and I heartily, in this caſe, concur with him, that if any regiment or corps has the fortune to have only one judicious, humane, and ſufficiently able field-officer, it may always be wiſely regulated, during his reſidence with it, and when he has the direction of the whole. More, he adds, is to be expected here from the lieutenant-colonel and major, than from the colonel, as it is but ſeldom he remains with the corps; but where all three concur to this end, and are deſirous of every uſeful information from literary men, as well as from thoſe of their own profeſſion, we may eaſily pronounce, that the regiment will be fit for ſervice on a very ſhort notice, and able to undergo the ſevereſt hardſhips *.

A ſurgeon's education (for I ſuppoſe him always to be liberally educated) renders him a proper perſon for much of the confidence of his commanding officer. In all things reſpecting

* See Brockleſby on Military Diſeaſes, &c.

ſpecting the ſoldiery (their manœuvres excepted) he can communicate, from time to time, much uſeful information. From his inſtruction, aided by the *orders* of the commanding officer, much diſeaſe may be prevented in the regiment. Domeſtic diſcipline and the arts of prevention, as is well known, can do more oftentimes than phyſic; and, what is ſtill better, may, for the moſt part, be applied with little or no incouvenience, either to the men themſelves or to immediate ſervice: and things tending to this end, it ſhould be his buſineſs to point out and inculcate. This will conſiſt of things little regarded but by the philoſopher.

Where the appointment of field-officers has been happy; and where a judicious regard has been paid to the medical appointment, almoſt every diſeaſe, except ſuch as ariſe from contagion, may be obviated in the regiment. Wiſe regulations ſtrictly enforced, will be found efficacious even againſt unwholeſome diet, climate, and the other viciſſitudes of a ſoldier's life. In the navy, where more care has been taken than in the army, we find it ſo; and ſince there are on land leſs obſtacles to encounter in putting ſuch regulations into

execution, we may reaſonably expect equal good effects. This, it is to be apprehended, will never come to paſs, till the ſurgeon has a ſuperior rank, and till more care be taken in the choice of this important officer. It is little we are to expect in the walks of philoſophic life from young and uninformed boys; yet much of regimental practice is committed to the care of ſuch. We may as reaſonably expect much military experience from beardleſs colonels, as much medical knowledge from beardleſs doctors: and yet, a man is not always to be eſteemed for his age.

To return: a very great complaint in the army is *blotches* over the body and extremities, often of a phlegmonic appearance, and to which ſome give the general name of ſcurvy. Theſe are ſometimes of a herpetic nature; at others a real pſora, or itch; or it may be a conjunction of both: for, I think, I have ſeen it ſo. Among ſoldiers they all go by the general name of the itch; and by many, I apprehend, are miſtaken for it, though the treatment ſhould be different. Such complaints are by officers looked on as eaſily and ſpeedily curable. It appears to them, who are unacquainted with the cauſes and ſeat of

diſeaſes, or with their diſtinction, a trivial affair: yet will it often be found quite the reverſe. Theſe cannot oftentimes be removed without a total change in the patient's manner of life. This will be eaſily underſtood, when we conſider, that a ſoldier's eating, drinking, and even clothes, are ſometimes in fault; and till theſe be all changed, no radical cure can take place. Let us ſuppoſe it the itch alone, and that his bed infected him, a cure cannot be made till his bed-clothes are either waſhed, fumigated with ſulphur, or changed. If he is in a billet, he may find it difficult to accompliſh either. The innkeepers will ſcarcely be at this trouble with a gueſt they ſo much diſlike.

When a ſoldier's food is of a thin, coarſe, watery ſort, *i. e.* of a quality that produces little chyle, and even this of a bad kind; or if the food be of too dry, or of an alkaleſcent nature, ſuch as living almoſt entirely on hard, tough, dry cheeſe, and coarſe bread, with little or no vegetable food, is it to be expected that his juices are pure? and I have known them live on almoſt nothing elſe for weeks together, when they were not put into meſſes. As well might we expect to reap whea from

tares, or oats from rye as find wholeſome juices here. If his frequent change of lodgings ſubjects him to dirty beds, will he not partake of the foulneſs of thoſe that lay in them before him? People who are forced to afford beds *gratis* will be at little pains to waſh them at each change of lodgers. From contagion, and from the cauſes now pointed out, the ſoldier may be at the ſame time affected with itch, and herpes; and though the ſurgeon may effect a removal of the one, as its cauſe and cure are well known, yet the other eruptions, which I ſhall call conſtitutional, cannot, by the beſt ſkill, the moſt rational treatment, be rooted out, till his food is changed for that of a more wholeſome, and nutritious quality, as well as his whole mode of life.

In barracks, many of the inconveniences under which the ſurgeons, as well as the men labour, are avoided. But, I am ſorry to ſay, the number of barracks in England is very trifling, when compared to the number of troops in time of war; and ſeveral of the few we do poſſeſs, are either too ſmall or otherwiſe ill contrived. The number, as well as conveniences of barracks, are much greater in Ireland. The uſefulneſs of a meſs

is obvious ; but in billets, where the privates are ſcattered up and down through the town, to form a meſs is next to impoſſible. Yet nothing conduces more to health ; for then, whatever their inclinations may be, they are ſupplied with, and obliged to live on, wholeſome food. Their pay is not given them at their own diſpoſal ; a certain portion of it is ſet apart for their diet. In billets it is far otherwiſe ; each man receives his pay, and is at liberty to expend it as he pleaſes. Many will drink their whole week's ſubſiſtence in an hour or two after it is received, and muſt ſtarve, or live on chance the ſix enſuing days ; and thoſe who do not behave ſo, generally make ſo bad a choice of their food, that their blood is impoveriſhed, and they become ſubject to inveterate cutaneous eruptions, as well as to other diſeaſes.

Cleanlineſs, alſo, in billets, is much leſs attended to, than in barracks. When ſcattered through a town, the ſoldiers are leſs attentive to this, becauſe leſs under the eyes of their officers. For although the rules of the army oblige them to appear twice a day on parade, this momentary, or partial cleanlineſs, is of little uſe in their general health. It extends to nothing farther than their ſhoes,

croſs-belts, and muſquets, with the whitening of their hair with a little flour: the chief part is ſtill neglected.

With regard to the removal of theſe eruptions, and foulneſſes, it ſometimes happens, that change of quarters does more towards it, than all the medicines the ſurgeon has exhibited, or can adviſe, *i. e.* if a route carries a regiment from a dear country to a place where the neceſſaries of life are cheaper. Clean, wholeſome, nutritious food, comes now more within the privates reach. He can eat, becauſe his pay better affords its purchaſe.

What makes the great difference between the officer and private with reſpect to theſe foulneſſes of the ſkin?—their manner of living alone. Could the private eat out of the ſame diſh, drink of the ſame liquors, ſleep in the ſame ſheets, and wear the ſame number of ſhirts, &c. in the week as his officer, his hands and legs would be as clean, and his ſkin as ſmooth. Officers, then, ſhould not be diſcontented with their ſurgeon, if theſe foulneſſes to which the men are, from the circumſtances mentioned, ſo liable, be not as ſpeedily removed as their wiſhes prompt them to expect, provided they find the ſurgeon attentive

tentive in applying remedies as far as lies in his power. In ſuch caſes, having a confidence with the commanding officer is a great conſolation. Should an injudicious report be preferred againſt him, it will not act to his prejudice.

The venereal diſeaſe is another evil which is ſo prevalent among the ſoldiery, that it cauſes no ſmall trouble and vexation to the ſurgeon, and is none of the leaſt of the inconveniences we are pointing out, which he is obliged to encounter. It brings him many hours of anxiety; for the officer frequently murmurs if the men be not ſpeedily cured of it; but it is oftentimes no ſooner removed than it is again contracted.

Among ſoldiers it is ſo prevalent, that no reproach follows it, either from their comrades or from many of their officers. While this is the caſe, all hopes of reformation are ſhut out. Yet, I would venture to give it as my opinion, that ſome puniſhment ſhould follow it; nay, every method practicable for its ſuppreſſion, as far as poſſible, ſhould be uſed. This has indeed been my language, when I have been anſwered, "It is the common courſe of nature to deſire

"women;

" women; if you can deprive men of paſſions,
" then you may of women, not otherwiſe.—
" And why attempt to deny ſoldiers a gratifi-
" cation which is ſo natural, and enjoyed at
" pleaſure even by the brutes?" But I would beg leave to anſwer theſe gentlemen, that it is only the common courſe of vice, not the common courſe of nature, thus to contaminate themſelves. It is true, that by nature we are all endowed with a ſtrong propenſity towards the female ſex. This is proper, as well as natural, ſince by the union of the ſexes the ſpecies is to be propagated. This is the method by which the Deity has thought fit to continue the human race, as well as the other claſſes of animals. We find male and female among not only what is called the rational, but the irrational part of the creation; and even in the vegetable kingdom ſomething ſimilar.

Among the rational, with which is our chief concern, though there be this natural propenſity of the ſexes for each other, yet the Deity has laid certain reſtraints on it. To have women in common, he well knew, would be the bane of ſociety, and muſt lay the foundation of many evils; and even tend

to

to the decreaſe, not the increaſe of the ſpecies. We ſee this experienced every day among that unfortuante claſs of females that live by proſtitution. Sterility ſeems to be entailed on them as a curſe. The irrational world, as I ſhall call them, live not in ſociety, like men; at leaſt live leſs in it; and this, perhaps, may be one reaſon for his allowing promiſcuous cohabitation among them. Another reaſon is, they are almoſt univerſally more continent, more chaſte, if I may be allowed the expreſſion, than the rational kingdom.

Among theſe, the times of heat keep pace pretty much with the times of geſtation in the female; or the returns of it in the female are according to thoſe periods of propagation. In the rational world it is different. A greater latitude is allowed by nature to them. Perhaps, partly for the exerciſe of their rational faculties, which point out what is right, and what is wrong, and, among other things, points out the bad conſequences of the too frequent and promiſcuous uſe of women; but this latitude is reſtrained within certain bounds by a wiſe prohibition: for had it not been ſo, "to encreaſe and multiply," at leaſt in the ſame proportion, would not have been ac-

com-

compliſhed. But granting that ſterility would not follow, other evils, of no trivial nature, would ſpring from thence. Paternal affection, if not altogether deſtroyed, would be much blunted; for as none could then certify his own progeny, none would be particularly intereſted in procuring it ſubſiſtence, or education. Beſides, the irrational world do not ſtand ſo much in need of this aſſiſtance. They come ſooner to maturity, to their acmé; nay, almoſt as ſoon as they come into the world ſome of them can nearly provide for themſelves. But man takes not only a long time to rear up, but much care; nor is it till after a long period he can provide for his own ſubſiſtence.

This ſeems another reaſon that renders it abſolutely neceſſary for both parents to unite their endeavours to produce this great effect; and till then, as a farther ſtimulus, or ſpur, that love and anxiety for our children's welfare, which is known by the name of *parental*, always continues. As they grow to maturity, however, and can provide for themſelves, it becomes more and more weakened; and, as old age, which produces feebleneſs and incapacity in the parents, approaches, duty teaches the children to give them their aſſiſtance

ance in turn. Hence the conſtant and continued tie of family affection.

But though it was ſaid, that the irrational world cohabited promiſcuouſly, yet, among ſome claſſes of theſe, we find a like ſtrict adherence of one male to one female, as long as it is neceſſary to effect the great purpoſes of nature. The winged creation court, and adhere to one mate, till their common progeny be capable of providing for themſelves. Then, and not till then, does the attachment ceaſe. After this, they forget one another: the purpoſe of nature being now anſwered, its longer exiſtence would be uſeleſs. It ſeems now to be altogether, and for ever diſſolved. As the parents ſtand not in need of the aſſiſtance of their progeny in old age, filial and parental affection have no longer exiſtence. This link ſeems alſo broken; for as birds are the prey of one another, it is very probable, few of them live to old age, *i. e.* to ſuch an age as renders them incapable of providing for their own ſupport. And this may be a farther reaſon why it becomes ſo ſoon, and ſo totally diſſolved. A remembrance of kindred could be productive of no good; on the contrary, it might ſubject them to anxiety and grief, ſhould they

they ſee, or know, the fate that may often attend their kindred.

The laws of nature, therefore, as well as the regulations of ſociety, have eſtabliſhed it very differently among the rational world: hence marriage, and the care of families. In a word, where the female confines herſelf to one male, propagation follows, and the order of nature takes place; but when ſhe rambles from day to day, looſe in her deſires, admitting every ſolicitor, barrenneſs is the conſequence. If this method was followed univerſally, would not the human race, in a few ages, become extinct? But this is a queſtion I ſhall leave to the farther diſcuſſion of the moraliſt, and proceed with my proper ſubject.

We ſaid, that the venereal diſeaſe was an evil which created great trouble to the ſurgeon, notwithſtanding its cure is ſo well known. Some method ſhould be deviſed, either for the entire ſuppreſſion of fornication, or at leaſt of rendering the opportunities of contracting the diſeaſe leſs frequent. To aſſiſt in this ſcheme, no countenance ſhould be given to ſuch practices by the officers. It ſhould always be followed with ſome puniſh-

ment;

ment; and, on the other hand, every poſſible encouragement held out to marriage, of which the nature of the ſervice will admit. We acknowledge, marriage is not prohibited in the army, yet I have long thought, that too little encouragement is held out for it; nay, I have ſeen a manuſcript book of orders, wherein the men were entreated not to marry. We know, however, many families are brought up in the army, among the privates, moſt of whom, as ſoon as fit, enliſt either in the regiment wherein they were born, or in ſome other. And from this ſource alone, a conſiderable body of troops, for the moſt part the beſt ſoldiers, are added to the army; and, I am confidently of opinion, it might be turned to much farther account for the public ſervice, by giving greater encouragement to marriage with modeſt women. I know there are difficulties attending it, which, in ſome meaſure, might be removed. When a regiment, for inſtance, is ordered on foreign ſervice, it is only a certain number of women that are permitted to go abroad. Proſtitutes frequently find means to go, when married women are ſeparated from their huſbands. This ſhould be prevented as far as

poſſible,

poſſible. Perhaps, if a regiſter was kept of the married men in each company, pointing out the time of the marriage, and the names of the parties, and this called over on embarkation, to aſcertain the really married, in order to exclude proſtitutes, and admit theſe, it might be ſome means of obviating this impoſition, and ſome encouragement for marriage. Every woman of bad fame found among the ſingle men ſhould be drummed away, while ſome reward ſhould be offered for diſcovering ſuch as on theſe occaſions kept them ſecreted, and ſome ſtigma of reproach put on the offender.

I do not know whether ſomething like the following might not anſwer to prevent fornication, at leaſt it might be tried, viz. That a certain ſum ſhould be deducted from the pay of every ſoldier who had contracted this diſeaſe. When they have not to pay for it, they contract it with the leſs reluctance. And this is the caſe in many regiments. But in others, again, each man pays a crown for his amour, which the ſurgeon gets for his trouble. Reſpecting this, I have in another tract ventured my opinion *. To pay this they

* See "Thoughts ſubmitted to Officers, relative to a Regi-
" mental Fund for the ſick Wives of the Privates."

they ſhould be put on ſtoppages of a penny, or two-pence a day, till diſcharged: hence the puniſhment would exiſt till the payment of the laſt penny. This would not too greatly diſtreſs them; but, at the ſame time, operate ſo far as to make them cautious in future. In the navy, a much ſeverer tax on this pleaſure exiſts. Each man pays no leſs than fifteen ſhillings for his cure. This alſo goes to the ſurgeon: perhaps it would be better if differently diſpoſed of. In the army, this venereal money ſhould be collected, and ſhould make part of a fund for the relief of the modeſt married women of the regiment, when incapacitated from earning their food by ſickneſs. And when a married man contracted the diſeaſe, the fine ſhould be doubled, both from the double dire effects it may produce on his wife, and for his having leſs temptation than an unmarried man of going aſtray. Here he breaks the marriage vow, ſo ſolemnly ſworn before God and the world; and, to add to his guilt, he makes the innocent a partaker of a loathſome diſeaſe, which not only may deſtroy her peace of mind, but her health ever after. I have but too often ſeen this the caſe in military life.

This is a complaint of all others with regard to which an officer ſhould be cautious of reflecting on the ſurgeon, if it be not ſo ſoon removed as he may ſuppoſe it ought. The truth of this will appear, if it be conſidered how liable the men are to impoſe here. The ſurgeon ſhall diſcharge a ſoldier to-day perfectly cured—that very night this man ſhall cohabit with ſome unclean proſtitute, and, in a few days after, he will return ill of the ſame complaint, newly contracted: firſt telling his officer, to ſcreen himſelf, and obviate a reprimand, as well as to obtain leave to be again returned in the ſick liſt, that the ſurgeon ſent him to duty before he was properly cured; but will cautiouſly conceal his new illicit amour. Hence it is kept hid for ſome time, and the blame muſt fall on the ſurgeon, till his comrade, or ſome of the men that were privy to the affair, diſcover it. Till this takes place, it goes current among the corps, that the ſurgeon turned him out too ſoon, as they call it. I have been frequently ſerved ſo, but I have always been happy enough to have the commanding officer on my ſide, and able to clear myſelf to him. I had a remarkable inſtance of this

in

in the ſummer of 1783, where an idle, ill-behaved private repeatedly ſerved me ſo, and had addreſs enough to make the lieutenant of his company give credit to his tale for a day or two, but the major, then the commanding officer, readily acquitted me *.

Another very ſtrong argument in favour of our opinion, that officers ſhould beſtow all the pains in their power to ſuppreſs this promiſcuous uſe of women in the army, is, the decay it ſoon produces in the ſoldiers conſtitutions. A man who has been frequently affected with this diſeaſe will never enjoy good health, nor be long fit for the duties of a ſoldier. If he contracts a confirmed pox, which he can hardly eſcape, how difficult is it to eradicate it out of the conſtitution! even in thoſe that can afford every conveniency to favour a complete cure, it is ſometimes not done without the utmoſt difficulty. It becomes much worſe in a private ſoldier, who has frequently every thing that tends to retard and prevent his recovery againſt him. In caſes, indeed, of this confirmed nature, it is ſeldom the officer will permit the patient to

* See "Thoughts to Officers," &c. where I have related this caſe at large.

continue long enough under the ſurgeon's care to perform a radical cure. The great number of ſick is his conſtant complaint. What can the ſurgeon do?—as ſoon as ſome of the worſt ſymptoms are removed, he marks him out for duty, to avert the blame of his keeping a patient ſo long in the hoſpital. But the unfortunate man is ſoon obliged to return: he has a rheumatiſm; univerſal pains; nodes; inflamed eyes; impaired ſight; impaired hearing; is aſthmatic; has obſtructions, perhaps of the liver; obſtructions in the urinary diſcharges, either in the bladder, or conſtrictions and caruncles in the courſe of the urethra; is affected with fiſtula in ano; is covered over with venereal ulcers; is totally cahectic; and though a young man, ſeems worn down with years and infirmities; a conſtant ſanies diſcharges from his head; he has glandular ſwellings; is hoarſe, from an affection of the palate; and has loſt a great part of his noſe; his head is giddy, ſo that when he ſtoops, he has ſcarce ſtrength to raiſe himſelf; his lungs are affected, and he has a ſevere cough, and purulent expectoration; he trails out ſome months longer a life of miſery, and then falls, at an untimely age, a martyr to his irregularities! From this

it

it muſt appear, how detrimental to the ſervice the venereal diſeaſe proves; and it appears alſo, how neceſſary it becomes to attempt, as much as can be done, its ſuppreſſion in the army.

Sore legs are another frequent complaint among ſoldiers, and prove alſo a very troubleſome affair on many occaſions to the ſurgeon. A ſoldier with ſores on his legs cannot properly do his duty, becauſe he cannot wear his long gaiters, and he dares not appear on parade for duty without them. Theſe may be of the herpetic kind already mentioned, or they may ariſe from a different taint; they may be venereal, and will only yield to mercury, and thoſe remedies ſuited to expel this poiſon from the blood. Although the ſore may be trifling, and ſuch as does not injure the general health, yet, if their conſtitutions be infected with the venereal diſeaſe, it may prove very troubleſome in healing. In this caſe, the officer may think it neglect in the ſurgeon, and want of proper management, to keep a man in the ſick reports for ſome weeks, with a ſmall cut on the ſkin, as they will call it. It is in vain to attempt an explanation of the cauſes that retard the cure: his

want of knowledge in the ſcience prevents his comprehenſion of the caſe; and, perhaps, his belief of what he is told may be wanting, eſpecially as the ſore may be ſmall, and as he forms his judgment totally from appearances.

In caſes, however, of this nature, the officer ought to rely on the fidelity and probity of the ſurgeon, provided he knows, from the general tenor of his conduct, he poſſeſſes theſe virtues.

A fine young man had a ſmall ulcer on one of his legs, for which he was ſent to the regimental hoſpital. He continued there above a month, and no cure could be made; for, like many of his brother ſoldiers, he was irregular, and fond of ſpirituous liquors, which, from time to time, he found ſufficient means to get brought into the hoſpital to him. The length of time he remained in it produced murmurs againſt the ſurgeon from the officers of his company. They were of opinion (it muſt be confeſſed, there was apparent reaſon on their ſide) that ſo trifling a ſore might have been more ſpeedily healed. He was therefore taken out of the hoſpital, and delivered over, as the term is, to the regiment. The

regiment

regiment then lay in barracks; and the poor fellow was confined, by one of the ſerjeants, to his barrack-room. The ſerjeant had, as a bravado againſt the ſurgeon, profeſſed *he* would ſoon *cure it*, provided he was put under *his* care. When once a ſoldier is ſtruck out of the ſick liſt, the ſurgeon is no longer anſwerable for him: hence he took no more notice how the man fared; and more particularly as his removal in this manner was intended as a reproach on him. Things went on for about two months, without farther enquiry on the ſurgeon's part, till one evening, the ſurgeon was ſent for in all ſpeed to viſit him, being informed by the meſſenger he was juſt dying. He found this ſtrong conſtitutioned man, for he was ſo when he left the houſe, ſitting up in his bed, and panting for breath: his ſhoulders raiſed nearly as high as his head; a great palpitation of the heart; an oppreſſion of the præcordia; with all the other ſymptoms of hydrothorax: the abdomen tumefied, and evident marks of aſcites; the extremities ſwelled; and, indeed, the whole ſyſtem in ſuch a condition, that medical aſſiſtance was in vain: the ſore on his leg looked worſe, and was more enlarged.

He was, without heſitation, pronounced near his end. He languiſhed, however, a day or two longer before he died. Here, the diſeaſe he fell into from cloſe confinement, and the ſerjeant's ſtrict diſcipline, not the ſore on his leg, were the cauſe of his death.

Whoever is acquainted with the human frame, and the nature and nicety of its component parts, will eaſily underſtand the conſequences of want of exerciſe, nay, almoſt of motion, for ſuch a length of time; the cloſe air of the room, in which lay thirteen others every night, with the heat alſo from cooking daily for ſo many men, all conſpired againſt him, together with the ſudden change made in his diet, which was now very ſparingly allowed; while, as an addition to the evil, he was in the vigour of life, and had previouſly been accuſtomed to take exerciſe to a great degree. It turned out, however, well for both the ſurgeon and regiment; for, had nature got the better of the ſerjeant's ſtrict diſcipline, and the ſore healed, though it ſhould have left a broken conſtitution, it would have proved a conſtant bone of contention between the officers and ſurgeon; and ſince it ended, as might be reaſonably expected, fatally, it will,

will, in that regiment, at leaſt, moſt certainly prevent ſuch raſh proceedings, and irrational, if not criminal quackery, for the future.

Thus have we pointed out ſome of the chief difficulties a regimental ſurgeon has to contend with in his practice; and, it muſt be confeſſed, ſome of them are not of a trivial nature. His own prudence, however, will teach him to obviate ſome of them. If he cannot prevent them all, conſcious of having diſcharged the duties of his ſtation and profeſſion, asfar as lies in his power, he will conſole himſelf under any undeſerved reflections that may be thrown on him in the courſe of his ſervice. Did there exiſt no other reaſon to wiſh the rank of a ſurgeon in the practice of a regiment greater, and the place more honourable, this alone would be a ſufficient one: I mean, that it might place him beyond the power of the ill-judged remonſtrances of perſons whoſe knowledge in his profeſſion, give them no ſhadow of claim to ſuch an authority, or aſcendancy over him.

It is the ſurgeon's duty to paſs recruits, *i. e.* to examine whether men inliſted be fit for the ſervice. In performing this, he labours under ſome difficulties; for, if the man be

be rejected by him as improper, the officer who enlisted him is offended; indeed in all probability, he is a great loser; for, if a recruit be not approved of, all that was given him is lost to the officer. But if, to please the officer, the surgeon accepts, and signs his name to the sound list, he is blamed afterwards by the regiment, as well as by the commanding officer, when it is discovered the man is always in the sick reports, and really unfit for a soldier. Here he must be discharged: the King loses by him, and the service is injured. We may place this, however, among the surgeon's difficulties; for he oftentimes finds himself in a dilemma; and, let him act as he will, on these occasions, he may be sure of giving offence to some party. It is wrong to cheat the King, and sign a falsehood: it is a pity to put an officer, who, perhaps, has only his pay to support him, and is now under the encreased expence of the recruiting service, to the loss he must sustain, by rejecting his recruit.

CHAP.

CHAPTER III.

OF THE SURGEON'S QUALIFICATIONS, AND OF HIS TENDERNESS TO THE SICK SOLDIERY.

I HAVE thus pointed out ſome obſtacles that oppoſe the ſurgeon's endeavours, and ſometimes fruſtrate his wiſeſt attempts. I hope he will now allow of equal freedom, and excuſe me, in placing ſome cautions in the oppoſite ſcale, which may more immediately concern his own behaviour. Though I ſhall do this with freedom, and without farther apology, yet it is only with a true wiſh for his welfare, and ſincere regard to his intereſt; and that he may be the better enabled to preſerve his good name, and, as far as poſſible, avoid deſerved cenſure from the officers, from his patients, and from the world in general.

The ſituation of a medical man is of all others the moſt delicate; and as it is a public line of life, the world is ever ready to make free obſervations on the conduct of thoſe engaged in the profeſſion. If theſe were always the reſult of deliberation, it would be of leſs moment: but this is not,

on

on all occaſions, the caſe. A trifle may gain, as a trifle may often loſe a practitioner a reputation, which, like a ſpot on white paper, can never be wiped out ſo clean as to render the ſtain imperceptible. It is as delicate as the character of a lady, where even ſuſpicion of ſome wrong ſtep, will ruin her fortune for ever. Hence the care we ought to obſerve, and the circumſpection we ſhould uſe in all our actions.

In entering into a regiment in a medical line, the firſt thing a ſurgeon ſhould have in view is, his own qualifications for the office he is about to undertake. He ſhould reflect on the nature of his charge, its great importance, and how culpable he muſt appear, both before God and man, in the neglect of any part of his duty.

The lives of upwards of ſeven hundred men are, I may ſay, put into his hands,* provided the regiment contains its full complement; and for the care he takes of them when ſick, he is anſwerable to his country, his King, and his conſcience. If he has found

* See *Introduction* for the complement of a regiment. The complement of ſome is even 1000; though, it is true, they are ſeldom complete.

found intereſt enough to fix himſelf in a ſtation which he knows he is ill qualified to fill, from his want of medical knowledge, or proper opportunities to receive it, he uſurps the place of the more liberally educated, and deceives his patients. Beſides, he impoſes on the regiment that accepts him, who, perhaps, before his admiſſion, were taught to believe far otherwiſe of his knowledge.

If good opportunities of information in the ſcientific parts of his profeſſion have previouſly been held out to him, and, inſtead of embracing, he has neglected them; if he waſted that time and money his parents or friends allotted him for the laudable purſuits of philoſophic inveſtigation, and a knowledge of medicine, in criminal idleneſs, or ruinous debauchery, whereby his health of body and powers of mind have been impaired and enervated, his conduct is highly reprehenſible, is culpable; and it is ſtill heightened by his puſhing himſelf into an office, where he may have it in his power, nay, cannot well avoid, to do much, though not intended miſchief. But, we hope, this is what does not often happen.

If the beſt informed underſtandings in the

the medical walks of life too frequently find great difficulties in determining how to act for the beſt, what can the leſs informed do when difficulties ſurround them? Can perſons unacquainted, perhaps, with the moſt obvious parts of phyſiology; even with the circulation of the blood, and courſe of the chyle, not to mention the ſituation and functions of all the different parts of that intricate, but noble ſtructure, the human body, pretend to remove the many diſeaſes to which theſe are liable?—pretend, indeed, they may, but, in their fortuitous attempts, there is but little rational probability to expect ſucceſs. Add to this, perhaps, their utter ignorance of the nature and properties of the ſubſtances they exhibit, and the effects they are likely to produce. This they have but little chance of knowing, ſhould the above ſuppoſition be true, ſince it will depend partly on the ſtate of the patient at the time, and partly on the nature of the medicine exhibited.

I am led to make theſe reflections from having obſerved numbers of young men paſs their time very idly at the univerſity, and other medical ſchools, where their friends had placed them for improvement. Many

there

there ſpend whole ſeaſons without ever applying to any thing ſerious, or ſcientific, till not only the time allotted for their ſtay has elapſed, but their money has been exhauſted. Several of ſuch, however, find means, through the aſſiſtance of friends, to obtain appointments in the army, particularly in time of war, either of ſurgeons or ſurgeons mates. Here we ſhould have ſome reaſon to conclude, did not charity forbid us, that they often commit eſſential miſtakes; for, however upright may be their intentions, their incapacity of forming and following proper plans is a bar to their ſucceſs. It is, indeed, frequently beſt for the patients, when perſons of this deſcription attempt leaſt. It is to be hoped, however, there are now few ſuch in the ſervice.

Many, likewiſe, who enter into the army in this line, never were at all within the limits of an univerſity, nor ever had an opportunity of hearing, in any medical ſchool, a ſingle lecture on the ſubject. If ſuch be qualified to aſſiſt the operations of nature, in removing diſeaſe and reſtoring health, the world may judge. Boys who have ſerved in the ſhop of ſome country apothecary only a

year or two, nay, it may be, only a few months, have been admitted, and that without any attempts towards an examination;* nay, we could point out cafes, where even a common ſoldier from the ranks, after aſſiſting the ſurgeon of the regiment, in ſpreading plaiſters, for ſome time, and in the capacity of orderly man, was appointed mate thereof, on a vacancy that ſoon happened; and, if he had outlived the ſurgeon, or a vacancy happened from promotion, or other cauſes, would, no doubt, have ſucceeded him in the office.† Genius, diligence, and a mind turned to

* A boy in a certain town in the North of England, as I am well informed, had ſerved there in an apothecary's ſhop about a year. A certain gentleman of rank in the army, who had ſome connections with the town, was then in America (it was during the late war). The boy's father was a freeman of the place. From this, and the gentleman's connection with it, the boy was ſent over to be provided for by him; which, without any farther medical education, as my informer aſſerts, was ſpeedily done, firſt by a mate's warrant, and ſoon after he was made a full ſurgeon to a regiment. Even while I am writing, a friend informs me of a young man under the ſame diſadvantages of education, who, after ſpending ſome time in a ſhop, was, by the zeal (I ſhall call it the intemperate zeal) of a friend, advanced from behind the counter to be ſurgeon, as well as an acting officer, in a militia corps. This may be relied on as a fact: my friend is acquainted with the party.

† Were it neceſſary, to gain it further credit, I could point out the name of the ſoldier, and regiment wherein this happened.

to enquiry and obſervation, may, in a great meaſure, ſupply the place of education; but where both are wanting, the conſequences are obvious. If proper proofs of ſuch talents have been exhibited by ſuch as receive theſe irregular appointments, it becomes ſome apology for the conduct of their friends in obtaining for them theſe ſtations. I hope, however, ſuch caſes as the above are not frequent. It is ſuch examples as theſe that lay the regimental practice under the diſgrace we in general find it.

It may be ſaid, the army is a good place for improvement in medical knowledge. In ſome reſpects this is true; but it is ſo to ſuch only as have been previouſly accuſtomed to reflect, and ſuch as are capable of making obſervations. Sir William Temple very judiciouſly obſerves, that "though a man may grow "learned by other men's thoughts, yet it is "from his own thoughts, as well as experi-"ence, that he will grow wiſe."* It is little of this kind we are to expect from an apprentice boy, or even one who has ſpent ſome idle time at ſome medical ſchool. Beſides,

* Vid. On Health and Long Life.

the army is a bad place to begin reflection in. The cuſtoms there are too much adapted to the want of thought, and the giddy diſſipation, which their youth, joined to their inexperience, renders them prone to follow. Dreſs, and ſhew, are but ill ſuited for ſerious ſtudy. Theſe make a conſtituent part of the life of a ſoldier; and, for a ſoldier, they may, and I believe are, neceſſary, in order to throw a luſtre, and kind of dignity round the ſervice. Theſe, for aught I know, may be altogether proper, in a certain meaſure, for the very exiſtence of the army; but they agree very ill with the ſcientific ſurgeon, or with him who wiſhes to become ſo. To uſe the words of an author we have already mentioned, and who has touched on the ſubject,* "All men "of candour, who have ever felt, or known "the force and happy effects of long and "diligent ſtudies, and continual application "to any ſyſtem of ſcience beyond moment-"ary impulſes, will make no ſcruple to al-"low, that a want of early culture, almoſt "a total deprivation in youth of intercourſe with "the moſt refined part of their profeſſion, and, "as

* Dr. Brockleſby. See Œconomical and Military Obſervations.

" as it moſt commonly happens, an abſolute " neglect of a liberal education in the gene- " rality of ſurgeons, are altogether apt among " them to induce quackery, or, at beſt, a nar- " rowneſs of thinking about medical ſub- " jects."

But I ſhall now ſuppoſe there is no farther need of theſe reflections, but that diligence has been united with the opportunities of improvement; and that the labours of thoſe gentlemen have at length been crowned by the honourable teſtimony of thoſe teachers of the different branches they have attended; that they have entered the army afterwards through a ſincere deſire of practiſing diligently, and conſcientiouſly, as far as their abilities and knowledge permit and extend; that their ſole wiſh is to be uſeful to thoſe under their care, and ambitious, at the ſame time, of their own farther improvement; converſing always with medical men, on medical ſubjects, as often as opportunity ſerves; and collecting facts, either from their own obſervations, or the obſervations afforded them by the relation of others. It is men of theſe diſpoſitions that can practice properly; it is ſuch only that can reflect true honour on the military

medical profeſſion. Such was the late eminent Pringle; and ſuch were many others we might mention in the ſervice, men of diſtinguiſhed merit, and well-earned fame.

The next caution I would beg leave to offer to the regimental ſurgeon is, tenderneſs to the ſick ſoldiery. Yet it need not be told men of the diſpoſitions now pointed out, that tenderneſs and humanity ought ſtrongly to mark the character of every one engaged in the practice of phyſic. They are already convinced it ought, from their acquaintance with the frailty, and miſeries that inevitably await the life of man. Miſery, of one kind or other, they are daily converſant with: nor am I apt to believe, as ſome have aſſerted, that this ſteels their hearts, and renders them more callous to the ſufferings of others. Habit, indeed, makes ſuch ſcenes more familiar, but it does not follow, therefore, that the feelings of humanity are obliterated, nor even the practitioner's ſympathy leſſened, becauſe, occaſionally they are obliged to give ſome pain, in order to reſtore health. A ſympathizing diſpoſition is amiable; nay, medically uſeful to the poſſeſſor, in as far as it impreſſes the patient with a good opinion of his doctor, which

which is always one ſtep towards the cure; for his advice and preſcriptions will now not only be more cheerfully and ſtrictly complied with, as appearing to be thoſe of a friend intereſted in his recovery, but a calmneſs, quietude of mind, and confidence will follow, very eſſential, it may be, to his future health. The contrary is brutal, nay, even impolitic, in the ſurgeon, would he rightly conſult his own eaſe; for, while it wounds the patient, it fails not to deſtroy this confidence. Beſides, it often makes the advice, admitting it to be good, either deſpiſed or neglected, unleſs it be ſuch as exactly ſuits the patient's inclinations; and, conſequently, it muſt create him more trouble by the protraction of the patient's illneſs.

What can add more to the diſtreſs of a poor ſufferer under ſickneſs, than roughneſs of behaviour in him from whom relief was expected? He is already weakened, and enervated by the affliction he is under. His ſituation, too, is generally leſs comfortable than he has experienced it in ſimilar circumſtances, before it was his lot to wear a cockade. He has now no friends near to ſympathize with him; no parental, or fraternal anxiety to watch over him, or procure

thoſe little delicacies that the ſituation of a ſick man often requires; none to perform thoſe other little offices of attention which, if in reality they do no good, at leaſt quiet the mind, and pleaſe the peeviſhneſs attendant on ſickneſs, and may even have their effects in co-operating with the doctor's advice. Theſe he may remember, and regret; while ſuch roughneſs in his ſurgeon makes the contraſt more perceptible, and adds to his uneaſineſs. He feels now, with a double pang, every harſh expreſſion uſed. Should any ſurgeon, or any man whatever, act in this way, I would not heſitate to call it both unmerciful, and unmanly. In a regimental practitioner more eſpecially ſo, ſince the ſoldier has it not in his power to reſent it, by calling in another. The nobleſt mind is always the moſt merciful, the moſt capable of tenderneſs and pity.

A behaviour of this kind in the army has this farther aggravating circumſtance againſt it, that not only the ſurgeon, but the ſoldiers well know, that in any other ſituation but this, if practiſing even among the poor of an hoſpital, or diſpenſary, he durſt not act ſo, ſince his intereſt, reputation, and livelihood,

would

would riſe up againſt him, and forcibly forbid it; powerful arguments, truely, to curb this irritable temper. Out of the army, it would immediately (and deſervedly) cauſe his diſmiſſion; nor would he ever after be employed, either by thoſe, or their connections, whom he had thus ſo brutally abuſed.

There is, I know, an argument uſed by ſome army practitioners, to palliate the rough treatment ſoldiers ſometimes receive from their ſurgeons. "If you ſpeak tenderly," ſay they, "to ſoldiers, you may be ſure never "to be attended to. Diſobedience and diſ-"reſpect will be the conſequence; and this will "not only injure the medical treatment, which "muſt be enforced when they refuſe to ſub-"mit to it, but will affect the ſubjection of "the men, and the diſcipline of the regi-"ment." This objection, I am apt to believe, is ill founded. We may find many among the privates of as ſubmiſſive a mind, and even humane, and tender feelings as in any other walk of life, among people of the ſame rank; nay, ſome alſo, whoſe rational faculties are not inferior to many who hold a high command over them. Such men will neither diſobey, nor yet diſregard the ſurgeon the

more for giving his directions in a ſoft, and tender tone of voice; nor will their officers have the leaſt cauſe to complain of more want of order among them from this ſource. Harſh, and ill-natured behaviour to men of theſe diſpoſitions is cruel. They know its injuſtice, and feel it ſeverely. They contraſt it with what, in a different ſtation, before they enliſted, they had been accuſtomed to:—the compariſon is wide; the treatment ſits heavy; they conclude they are become ſlaves, and are now unhappy.

—"But to think, may it pleaſe your ho-"nour,", 'continued Trim, a tear ſtealing 'into the corner of his eye as he ſpoke,'—"to "think of two virtuous lads, with hearts as "warm in their bodies, and as honeſt as God "could make them—the children of honeſt "people, going forth with gallant ſpirits to "ſeek their fortunes in the world—and fall "into ſuch evils!"

TRIST. SHANDY.

Several, we know, enliſt from misfortunes, who once kept decent houſes, and lived reputably among their neighbours. In the army there is no reſpect of perſons; no diſtinction made. They muſt eat the ſame food, lie

lie in the ſame apartments, do the ſame duty, and ſuffer all the hardſhips their ſtation ſubjects them to, equally with their more hardened, and leſs deſerving comrades, who, perhaps, never experienced a way of life ſuperior to that in which they are now engaged. Theſe are the men on whoſe minds harſhneſs of treatment dwells with more pungency. Nay, I freely confeſs, I never knew any good purpoſe anſwered by it, even among the ill-behaved; the privates of real bad character: for, every one knows, the army, in times of war, is a medley of all characters, from thoſe we have been deſcribing, to the common highwayman. Though they dare not reſent the ſurgeon's treatment, they hate him, and will take the firſt opportunity of doing him an injury, if they think a diſcovery may not follow, which would end in their own puniſhment. They ſwear at him when his back is turned; nor is he a whit nearer his purpoſe by it; on the contrary, I have ſeen the brutal, half-ſavage diſpoſition ſoftened down into humanity, by tender and kind uſage, or even expreſſions, in his illneſs. Let the trial be only made, and I will anſwer for its ſucceſs.

What

What purpoſe does it ſerve, I would aſk, to threaten, and ſwear at a ſoldier for being reported ſick? If he be really indiſpoſed, he has a right to the indulgence of an hoſpital; if *ſconcing*, or *maligning*, as the term is, let his name be ſtruck out of the liſt without more words, as ſoon as the impoſition is detected, and let the ſerjeants of his company take care of the reſt. While the ſurgeon does not retain his name in the ſick report, it becomes their duty to ſee him perform his. But let it never be forgotten, that an accurate examination of his complaints, whether pretended or real, is to be made before this ſtep be taken. We have touched, however, on this topic already. I am of opinion, this will do more to ſuppreſs *ſconcing*, or ſhifting of duty, for the ſake of a day or two's reſt in the hoſpital, than haſty paſſion; and every one will agree with me, that it is more creditable. But this behaviour, we hope, in regimental ſurgeons, is little practiſed, and the leſs need, therefore, of cautions for its prevention. Yet, in a work of this kind, it was thought proper to point out not only its bad tendency but abſurdity, ſince we have known it practiſed. In the army, whoſe laws are arbitrary, and

abſolute, and where every one holds a command over another, from the top link to the bottom of the chain, even mild diſpoſitions will, in time, partake of this domineering infection, meerly from obſerving it conſtantly practiſed, and ſlide inſenſibly into the ſame. Surgeons ſhould be doubly careful to guard againſt it, who, from the nature of their profeſſion, ſhould, as the poet beautifully expreſſes it, never be found to want a ſufficient ſhare of "the milk of human kind-"neſs."

Again, with regard to neglect when ill, nothing hurts a ſoldier more. He knows he pays for his medicines out of the ſmall ſubſiſtence which falls to his lot; that government likewiſe pays for a doctor to attend him when he needs it; and that, therefore, it is the ſurgeon's duty to viſit him regularly. It is well known, the ſervice is liable to hardſhips enough in health; the bed of pain ſhould be as well ſmoothed, and made as eaſy as poſſible. It is ſeldom a ſoldier who is well uſed, and has been for ſeveral years in the ſervice, deſerts his colours. As much lies almoſt in this department, as where the officers are concerned. Every department ſhould

conſpire

conſpire to give him all the indulgence of which his ſituation can admit, and to act juſtly towards him. It is a pleaſant thing, either for a ſurgeon or an officer, to hear, "*God bleſs him!*" echo, in half whiſpers, through the ranks, as he paſſes along. It is the voice of applauſe—the plaudit of approbation—which publiſhes the performance of his duty, and which, if every officer, as well as ſurgeon, endeavours to deſerve, he will as aſſuredly receive.

A ſoldier is far from ungrateful; he will oblige chearfully when it is in his power. Retaliation, we confeſs, ſometimes, alſo, marks his character. Unfeeling, ſevere, and inhuman officers, have often fallen in the day of battle, nay, on a review day, by the hand of ſome of thoſe whom formerly they have unmeritedly abuſed. On the other hand, officers deſerving to live, have been brought off the field in triumph, by a grateful ſoldier, at the hazard of his own life, when their wounds have prevented their retreat, and expoſed them to the danger of either being killed, or of falling priſoners into the hands of the enemy. The ſurgeon, like the reſt of the corps, is liable to incur the diſlike, or, by

his prudent behaviour, obtain the approbation, and favour of the ſoldiery. His chief care ſhould be to deſerve the latter.

In different chronic complaints, where the patients, though kept in the hoſpital, are not confined to bed, the ſurgeon ſhould grant them as much indulgence as poſſible, with ſafety. This may not only gratify them, but may really conduce to the cure, by keeping their ſpirits up; for confinement to a ſoldier is a great bondage. The ſurgeon's great fear is of their irregularity, and their eating, and drinking now what is improper for their ſituation; for a ſoldier will hardly deny himſelf an indulgence of this kind, if it falls in his way, whatever be the nature of his complaint. Deſertion, alſo, we own, may ſometimes follow too great a licence; but as he is always allowed a corporal's guard for his hoſpital, he will have the leſs to fear from deſertion. The chronic patients often entreat permiſſion to walk out an hour or two in the heat of the day. This ſhould always be granted, when ſome material reaſons do not forbid; men ſuſpected of *ſconcing* ſhould be refuſed; when it is granted, they ſhould never be truſted without one of the men on

guard

guard to accompany them, leſt ſome ſcheme of deſertion be attempted. This is a proper caution on the ſurgeon's part, who muſt anſwer to the commanding officer for all the men under his care. When requeſts, however, of this nature muſt be refuſed them, let it be done with a ſeeming concern and reluctance; nor let the ſurgeon think it beneath him to add his reaſons. By this means, the refuſal will almoſt ſatisfy them as much as if he had complied with their wiſhes. In fair warm weather, they ſhould always be permitted to walk out, for ſome time, when it does not interfere with the means of cure. The exerciſe will keep up the languid ſecretions, induce cheerfulneſs, and render their ſituation more happy.

To maintain the better order and regularity in the hoſpital, the chronic patients ſhould be under the command of a non-comiſſioned officer. It is ſeldom the ſick liſt is without either a ſerjeant or corporal. The ſurgeon ſhould take advantage of this, and give him the command in his abſence. The ſoldier of the ranks always obeys a non-commiſſioned officer: the diſcipline of the army requires it. It is better to delegate this power to a ſerjeant

or

or corporal than to the nurſe, for they may then refuſe obedience. By this means there will be a check on the diſorderly, and turbulent; and the quiet of the hoſpital will be better preſerved, a point ſometimes very eſſential. I have been ſent for, to conſiderable diſtances, merely to quell their diſputes. It is on ſuch occaſions as this, that ſome ſeverity, in order to preſerve peace, *muſt* be ſhewn to individuals. In order to reſtore tranquillity, and prevent future quarrels, the ſurgeon is indiſpenſably obliged, however reluctantly to confine, *i. e.* to ſend them under a centinel to the *black hole*, or commit them priſoners, with a written crime, to the officer on guard, who will return them to the commanding officer when he is relieved, with their crime, ſtated in his reports; after which, the ſurgeon has it not in his power to releaſe them; but this he may do between the time of commitment and the relief of the morning guard: they muſt then abide by the ſentence of the field officer, or a court-martial; if the offence be of a nature to require it. As men in the hoſpital are never there without real complaints, the black hole, or returning them to the commanding officer, will ſubject them to a puniſh-

a puniſhment too ſevere for their ſituation, this ſhould never be done but in emergencies. The black hole, where perhaps, they may lie for days on ſtraw, without being undreſſed, and in a ſmall, confined, nauſeous ſpot, may not only tend to aggravate their complaints, but, from the cold they receive, aided by the medicines they were taking, may induce other diſeaſes dangerous to life: this ſhould be kept in view, and, if poſſible, they ought not to be ſubjected to this ſevere puniſhment. To *clog* the offenders will do them leſs injury, and may be puniſhment ſufficient. They may lie on their beds, or ſit up in a corner, with the clog at their legs, without detriment to their health, till they ſolicit to have it removed, by a promiſe of good behaviour. But, on theſe occaſions, a ſurgeon ſhould judge cautiouſly, and never exerciſe his authority wantonly, or make the puniſhment ſeverer than the offence deſerves; nay, even overlook it, where the health of his patient might be affected thereby. There is even more ſeverity than may, at firſt ſight, appear from having a large clog of from fourteen to twenty pounds weight, locked on the leg for a day or more; beſides, there is an ignominy united

to

to it, which is felt ſometimes ſeverely by thoſe of ſpirit.

Under the head of tenderneſs, I may place a ſort of deception *abſolutely neceſſary*, ſometimes, to be practiſed; a deception of all others the moſt pardonable, and innocent, ſince it has for its object the welfare of the perſon on whom it is practiſed. A deception of this nature, if it deſerves the name, may occaſionally be practiſed, with the happieſt effects, to allay inordinate action of the mind, raiſe the drooping ſpirits, and remove inquietude, by confirming the patient's hopes, and ſeconding his wiſhes, in promiſing ſomething on which he may have riveted his affections, and placed his happineſs. This, perhaps, may be the only means to remove his diſeaſe. Beſides, ſometimes it may be in his power to perform promiſes of this kind.

A remarkable inſtance of this nature happened in my practice, in the ſummer of 1781, while I lay in barracks at Tinmouth, in the North of England. A recruit, who had lately joined the regiment, named Edwards, was returned in the ſick liſt, with a meſſage from his captain, requeſting I would take him into the hoſpital. He had only been a few months

a ſoldier; was young, handſome, and well made for the ſervice; but a melancholy hung over his countenance, and wanneſs preyed on his cheeks. He complained of univerſal weakneſs, but no fixed pain. A noiſe in his ears, and giddineſs of his head. Pulſe rather ſlow than frequent; but ſmall, and eaſily compreſſible. His appetite was much impaired; his tongue was ſufficiently moiſt, and his belly regular; yet ſlept ill, and ſtarted ſuddenly out of it, with uneaſy dreams. Had little or no thirſt.

As there were little obvious ſymptoms of fever, I did not know well what to make of the caſe. I ſuſpected he might be under an incipient typhus, and ordered what I judged neceſſary to obviate it. Some weeks paſſed with little alteration, either for better or worſe, except that he was evidently become more meagre. He ſcarcely took any nouriſhment, yet had hitherto ſat up out of bed ſome hours every day. At length he became indolent; ſeldom ſat up at all; was conſtantly dozing, yet his ſleep never ſo ſound but he could anſwer when ſpoke to; ſighed deeply and frequently; nor could his attention be diverted to any external object. Something,

it

it would ſeem, hung heavy on his mind. He never had any cough; yet, ſince he came into the houſe, had waſted away conſiderably. Exerciſe was recommended, and uſed as far as he could be rouſed to take it, which was never without reluctance. He was put on a courſe of ſtrengthening medicines; wine was allowed him. All proved ineffectual. His pulſe had changed with his appearance, and was now ſmall and quick; an evident fever of the hectic kind, as it ſeemed, with an evening exacerbation, took place. He had now been in the hoſpital near three months, and was become quite emaciated, and like one in the laſt ſtage of a conſumption.—Eyes were grown hollow; cheeks prominent; nails incurvated; adnata pellucid; and ſo weak in his limbs, that he could neither get in nor out of bed without help; of late, alſo, had night ſweats: in ſhort, I looked on him as loſt. On making my morning viſit, and enquiring, as uſual, of the nurſe concerning his reſt, ſhe happened to mention the ſtrong notions he had got in his head, ſhe ſaid, of home, and of his friends. What he was able to ſpeak was conſtantly on this topic. This I had never heard of before. The reaſon ſhe gave

for not mentioning it was, that it appeared to her to be the common ravings of ſickneſs and delirium. He talked in the ſame ſtile, it ſeems, leſs or more, ever ſince he came into the hoſpital. I went immediately up to him, and introduced the ſubject; and, from the alacrity with which he reſumed it, yet with a deep ſigh, when he mentioned his never more being able to ſee his friends, I found it a theme which much affected him. He aſked me, with earneſtneſs, if I would let him go home. He came from Wales; and I pointed out to him how unfit he was, from his weakneſs, to undertake ſuch a journey till he was better; but promiſed him aſſuredly, without farther heſitation, that as ſoon as he was able, he ſhould have ſix weeks to go home. He revived at the very thoughts of it. At this time, however, I made a promiſe which I knew was not in my power to perform, without the conſent of the commanding officer, who alone can grant furloughs; but as my hopes of his recovery were very ſlender, my raſh promiſe could give me the leſs uneaſineſs, and my ſcheme was, to animate his hopes, and endeavour thus to take advantage of the change that his mind might undergo by

by it, to co-operate with me in removing, if poſſible, the malady.

It ſeems, he had requeſted leave to viſit his native place ſoon after he joined the regiment, but being only a recruit, and having come from thence but a few months, he was refuſed. This had hung on his ſpirits ever ſince; and from that circumſtance I now dated the origin of his illneſs. I entreated him to take food to ſtrengthen him for his journey; and, as ſoon as able, to go out into the open air a little every forenoon, when the weather would permit, that he might be the ſooner able to go home. He liſtened eagerly to every word I ſaid. In ſhort, his appetite ſoon mended; and I ſaw, in leſs than a week, evident ſigns of recovery. He was now lively, though ſo weak that he could not yet get in or out of bed without aſſiſtance; he ſtrove to ſit up; two men took him between them in the heat of the day, and placed him on a ſeat they had erected for him on the beach, where he had a view of the ſhipping, for it was on the ſea coaſt. In a little time he was able to walk. Every viſit I paid him he reſumed the ſubject of *the furlough*, which I perſiſted in promiſing, ſeeing the good effects it had already produced; and in leſs than two

months from the time he had received this promiſe, he was able to leave the hoſpital, and go to his barrack-room. I ſet myſelf about endeavouring, as far as in me lay, to accompliſh his furlough; for he paid me almoſt daily viſits, aſſuring me he was able to undertake his journey, if I would allow him; for he firmly relied on my word. I was in ſome dilemma now how to act. Yet his ſtory was already known throughout the regiment, and the imminent eſcape he had from death. The deception, however, if I had dropped it here, was tenderneſs, and a regard for his recovery; but I went farther; I made public, to all the officers, the method I fell on to recover him, and told them moreover, that if I did not ſucceed in obtaining him a furlough, I was ſure he would relapſe, as ſoon as he underſtood his expectations were to be fruſtrated. I won them over to my intereſt. The ſtory was publicly talked of; the commanding officer was likewiſe acquainted with it; and the requeſt was now made to him, which he obligingly granted.

Noſologiſts mark out to us a certain diſeaſe, under the name of *noſtaliga*, or a longing after our native country, or home. If the foregoing

ing caſe comes not under that head, I know not under what genus to place it.*

Dr. Zimmerman, in a work of his (Experience in Phyſic) which I have peruſed ſince the above was written, ſays, the Swiſs are extremely ſubject to fall into this ſpecies of melancholy when in a foreign country. It ſometimes, he tells us, proves fatal in a ſhort time. Barrere has ſeen it in ſeveral Burgundy ſoldiers, who were forced into the ſervice, or refuſed their dimiſſion. Dr. Auenbrucker, has alſo frequently obſerved it in young people, who had been enliſted by force, and deſpaired of ever ſeeing their home and friends again. They were firſt ſilent, languid, penſive, emitted deep ſighs, ſeemed exceedingly ſorrowful, and gradually became inſenſible to every thing. Among the Auſtrian

 troops,

* In Dr. Cullen's Noſal. G. 106, this diſeaſe is characterized in the following words:—"Noſtalgia.—In abſenti-"bus a patria, vehemens eandem reviſendi deſiderium." This eminent profeſſor has marked two ſpecies of the diſeaſe in the laſt (4th) edition of his work.—"1. Noſtalgia *(Simplex)* ſine alio morbo.—"2. Noſt. *Complicata*—aliis morbis comitata." Sauvages has done the ſame. Vogel conſiders the diſeaſe as a ſpecies of melancholy, and has given it a place in his Noſology as ſuch.—Vid. G. 332. His words are, —"*Melancholia*—Inſania longa cum mæſtitia ac timore.—"*Noſtalgia* ejus ſpecies eſt."

troops, the ſame author tells us, it was formerly very frequent, but it is now extremely rare, ſince a plan has been adopted for enliſting ſoldiers only for a certain number of years, and diſcharging them when this time is expired. "I believe," adds Dr. Zimmerman, "it will be found among men of every nation, "who, in foreign countries, feel the want of "thoſe delights and enjoyments they would "meet with among their friends at home.—In "ſhort," he goes on, "every Swiſs feels, as "I do, the *noſtalgia*, under another name, "though at *home*, whenever he thinks he "ſhould live better in any other country." Dr. Auenbrucker obſerved, that in ſeveral who died of this diſeaſe, the lungs adhered to the diphragm, and that ſome part of the lungs was indurated, or was even become more or leſs purulent; and I am happy to find, the method of cure he relies on is the ſame which I adopted in the above inſtance. When the diſeaſe has not degenerated into phthiſis, or *madneſs*, wonderful effects have been produced in patients, by inſpiring them with the hope of ſoon ſeeing their friends and their home again. Dr. Zimmerman relates an inſtance of its good effects on a Swiſs of the canton of Berne,

Berne, who ſtudied phyſic at Gottingen: he fancied that his aorta was about to burſt, and could not be prevailed on to ſtir out of his chamber. About this time his father ſent for him home; he then ran over all Gottingen, with the greateſt joy and alacrity, and took leave of all his acquaintance; yet, two days before this, he was hardly able to get up a little ſtair-caſe, without being in danger of ſuffocation! His father afterwards ſent him to the univerſity of Baſil, and from thence to the French part of the canton of Berne, the fineſt country in Europe, ſituated along the lake of Geneva. Here he was again attacked with the *noſtalgia*: he is now, he adds, in perfect health.

I knew an inſtance myſelf in 1786, ſomewhat ſimilar to this, in a young lady at a boarding-ſchool. She was of a delicate make; and though the confinement in ſchool was by no means ſuch as could much injure her, had ſhe liked her ſituation, which ſhe did not; yet ſhe became cahectic, had a cough, which forced up ſtreaks of blood, her legs and ancles ſwelled, and ſhe was on the brink of a phthiſis pulmonalis. She was removed from ſchool (where ſhe never thought herſelf happy) to her great ſatisfaction, and ſoon recovered. This uneaſineſs to live

at

at home preyed on her health. Tho' ſhe recovered however from the preſent illneſs on being removed to her father's houſe, yet I am ſorry that truth obliges me to add, that about a year and half after this happy change, ſhe relapſed: a phthiſis pulmonalis now followed, (an hereditary diſeaſe in her family) and cut her off in the flower of youth and beauty. In the ſpace of about three years from thence, two of her ſiſters likewiſe fell ſacrifices to the ſame malady. The caſe of this Lady however is a ſtrong example to our purpoſe, and proves from the recovery ſhe experienced, the neceſſity of our endeavours to remove uneaſineſs of mind, not only as a prelude to, but as a principle means of reſtoring health.

We every day hear of people dying of *broken hearts*, as it is expreſſed, *i. e.* of a depreſſion of ſpirits, occaſioned by diſappointments of various ſorts. Perhaps they may all be placed under the ſame head.

In the begining of the ſame year, I aſſiſted at the diſſection of a ſoldier, in Newcaſtle upon Tyne, of the South Lincoln militia, who, the ſurgeon aſſured me, had died of love. Before his death, he was likewiſe greatly waſted; ſo that his caſe might be ſtiled *atrophia*. Like Edwards,

Edwards, whoſe caſe we have related above, he had no cough, but nightly ſweats, and exacerbations of fever. He took little or no nouriſhment, and, in other reſpects, was very ſimilar to our patient. That he died from the effects of this depreſſing paſſion, all the corps to which he belonged agreed, ſome of whom knew his attachment before the regiment marched from their own country to this. Perhaps ſimilar means, *i. e.* a deception, by raiſing his ſpirits, and cheriſhing his hopes, till time and new objects could have effected a change, might have ſaved his life.

I believe every one is agreed that this is to be placed among the melancholy paſſions. Sometimes it acts ſuddenly, and violently; at other times, like intenſe grief, it gradually undermines the conſtitution. The more general effects of this tender paſſion are, a tremulous pulſe, deep ſighs, an alternate glow and paleneſs of the cheeks, dejection, loſs of appetite, a faultering ſpeech, cold ſweats, and watchfulneſs, which gradually terminate in conſumption, or, perhaps, induce inſanity, and ſometimes ſuicide. Richardſon, in his Clariſſa, has well deſcribed the effects of this paſſion. Tulpius gives us a curious inſtance of its effects:

the

the ſubject of the caſe was a young Engliſh-man, who met with a refuſal from a lady. He became perfectly rigid, and motionleſs, ſitting in the ſame attitude with his eyes open, and appeared rather like a ſtatue than a human being; he continued in this poſture till night, and then being told that his miſtreſs yielded to his paſſion, he roſe inſtantly, as if from a profound ſleep, became more cheerful, and ſoon recovered.*

The above caſes prove, the vaſt influence the paſſions have over the body, and how much it is incumbent on the practitioner to ſtudy the ſprings of the mind, as the ſource from which he is to deduce the cauſes of many diſeaſes, and take every advantage for their removal, which an inveſtigation of theſe may put in his power.

To conclude, the more our minds are diſpoſed to do good to mankind in general, the more ſhall we be inclined to exerciſe the virtue of tenderneſs and care towards our patients in particular; and I am convinced our ſucceſs, in many caſes, will keep pace with ſo meritorious a conduct. Every practitioner, who has for any time been converſant with ſick people, will

* See Zimmerman, *ut ſupra*.

will ſoon ſee, that to his own behaviour, in this reſpect, he may attribute much. I am perſuaded, he will find this obſervation applicable, whether his practice be in the confined circle of a regimental hoſpital, or in the more enlarged ſphere of an extenſive neighbourhood.

CHAP.

CHAPTER IV.

SURGEONS CAUTIONED AGAINST SPENDING TOO MUCH TIME IN AMUSEMENTS WITH THE OFFICERS, LEST THEY THEREBY NEGLECT THEIR DUTY; AND OF THE IMPROPRIETY OF GRANTING THEM DOUBLE COMMISSIONS.

THOSE who live in the army are ſubject to many temptations. Men here always in a ſociety diſtinct in itſelf, and having little connections with the reſt of mankind, though dwelling in the midſt of them; at a diſtance from friends, and, therefore, with leſs reſtraint on their behaviour; among companions of various diſpoſitions and tempers, with whom they are, in ſome meaſure, obliged to aſſociate; and theſe, for the moſt part, young, and with their paſſions in their utmoſt vigour; together with the gaiety and levity with which they ſee themſelves every day ſurrounded, all which conſpire to baniſh care, as well as ſerious reflection. Yet all this, though pleaſing for the preſent, will depart, "like the baſeleſs fabrick of a viſion." It will, therefore, demand the ſurgeon's utmoſt prudence and fortitude, whoſe duty obliges him to reflect more

more than the reſt of the corps, to obſerve a proper circumſpection under theſe circumſtances; nor will he find it an eaſy matter ſtrictly to adhere to good reſolutions, though entered into with earneſtneſs, or reſolved to be followed with the ſtricteſt punctuality.

I do not mean here, that the ſurgeon ſhould avoid the company of the officers, or yet ſhun ſociety at proper ſeaſons, or ſeem moroſe, or affect a gravity unnatural for his years, and unmeaning in itſelf; this is equally as bad as too much levity, ſince it may induce a diſagreeable ſeverity of temper, by no means laudable, and point him out as an oddity, and a butt for the younger men to exerciſe their wit on; but, my meaning is, that he ſhould endeavour to find the middle point between ſhunning, and courting their company; between the folly of too much levity, and an affected ſtiffneſs. As their purſuits as well as duty, and thoſe incumbent on him, are ſo oppoſite, the leſs time he ſpends with the officers, the more will remain for the ſervice of his patients. He will have the more leiſure to peruſe authors who have written on the diſeaſes he may then have under his care; or to commit to writing ſuch obſervations as the caſes may have ſupplied him

with, for the improvement of his future practice. This will be a ſufficient apology for his appearing ſeldom with them, either in ſauntering about the ſtreets and fields, or in their other parties of pleaſure.

Every officer will reſpect a ſurgeon of good behaviour, and diligence in his profeſſion. Every officer either does, or ought to treat with contempt, the contrary conduct. I am of opinion, how harſh ſoever the expreſſion may ſound, that a negligent ſurgeon ſhould be conſidered among the corps in the ſame light as they hold a *coward*. He ſhould be avoided as a diſgrace, not only to them, but to the ſervice; nay, to humanity. From whatever cauſe it proceeds, it ſhould be marked with ſome ſtigma of reproach, ſome public token of diſapprobation. When an officer behaves either in a *cowardly*, or otherwiſe ignoble manner, he is ſent, as they call it, to *Coventry*, *i. e.* none of the corps will either ſpeak to him, or ſuffer him to aſſociate with them, till he makes a proper apology for his behaviour, if it be ſuch as can admit of an apology. I could wiſh the ſame law was to extend to the ſurgeon, if ever he is detected in neglecting the ſick, or other ill treatment. As to his not aſſociating on all occaſions with the

officers, which we wiſh here to inculcate, the reflecting part of the corps will never blame him, nor treat him as of leſs conſequence for being ſeldom of their parties. A greater cauſe of complaint they will have, if he acts a contrary part.

Beſides, to uſe the words of an eminent author, * " our attention becomes more " perfect by the advantages we derive from " a habit of obſerving. The mind, ſatisfied " with its former diſcoveries, becomes always " more deſirous of improvement, in propor- " tion as it extends its knowledge ;" for it is certainly true, that " ſcience is the clue by " which the phyſician" (an army ſurgeon, as we ſhall endeavour to ſhew afterwards, ſhould poſſeſs the knowledge of the phyſician) " is " enabled to penetrate into the labyrinth of " nature."

Is it to be ſuppoſed the ſurgeon who paſſes his mornings in walks of recreation, or the day in ſports, and the evening, when the bottle does not intervene, at cards, billiards, or backgammon, can have the complaints of his ſick ſoldiers much at heart ? Without application he never can become tolerable, much

* See Zimmerman on Experience in Phyſic.

leſs eminent, in his profeſſion; for it is a wide field, and requires much cultivation. But if time be miſpent as above, what remains for ſtudy? When he ought to read, or be engaged in reflecting on, and inveſtigating the cauſes of diſeaſes, perhaps he is amuſing himſelf in the fields, if the weather permits, with ſome of the corps; or, inſtead of cultivating the reciprocal and profeſſional communications of his brother ſurgeons, or other medical friends, and receiving and giving inſtructions, the hazard-table employs no ſmall ſhare of his time.

It is not meant by this, that recreations are entirely to be forbidden—far otherwiſe; a proper ſhare of relaxation, like ſleep to the body, will render the faculties of the mind more vigorous. It is too ſerious a matter, however, to ſpend a whole life in paſtime. Recreation, then, may be taken even daily to a moderate degree; but, ſurely, reading and reflection ought not to be neglected. A mechanical routine of practice is of all others the moſt contemptible, whether in or out of the army. A man who has only one preſcription for all diſeaſes, is a quack to all intents and purpoſes; nor is he leſs ſo, whoſe head is

ſtuffed

ſtuffed only with preſcriptions. A mechanical routine, alſo, it muſt be, unleſs a certain portion of our time be dedicated to the peruſal of books, the examination of the progreſſive improvements made in the ſcience, and the careful obſervation of phænomena at the patient's bed ſide.

" Without ſound judgement," ſays a reſpectable author, * " the poſſeſſion of a mul-
" tiplicity of preſcriptions is not merely uſe-
" leſs, but likely to be of dangerous conſe-
" quence. If a man had a whole diſpenſary
" by heart, which contained the moſt excel-
" lent preſcriptions for all diſeaſes, but had
" not underſtanding ſufficient to diſcern the
" particulars of caſes, and the difference of
" conſtitutions, and to vary his method ac-
" cordingly, he would ſtill be as unfit to
" practice phyſic, as a man who had learned the
" terms of art, and the common rules of navi-
" gation, but had never been at ſea, would be to
" direct the management of a ſhip in a ſtorm,
" or among rocks, or upon dangerous coaſts."

It is a common adage, that a man will ſoon partake of the manners and behaviour of his company. Their purſuits, their amuſe-

 ments,

* Vid. Coe on Biliary Concretions, &c. p. 238.

ments, their inclinations, will become ſimilar, as well as their converſation. Whatever be the leading paſſions of thoſe we have been long intimate with, we fall inſenſibly into the ſame. This rule holds as well in virtue as in vice. Hence the utility of good examples in forming and directing this bias of the mind into a proper path; and hence, alſo, the pernicious effects of bad examples in producing the oppoſite diſpoſition.

It is from conſidering the power of habit on the mind I have ventured theſe reflections; but I ſhould be ſorry to have it underſtood as inſinuating any thing to the prejudice of officers. The concluſion I wiſh to draw is only this, that the more we converſe and aſſociate, in our leiſure hours, with thoſe of our own profeſſion, the more will our minds be attached to it, and *vice verſa*.

And this leads me to diſſuade from the practiſe of granting ſurgeons double commiſſions, viz. that of both ſurgeon and officer. The ſame arguments we have already uſed againſt aſſociating too much with the officers, to the prejudice of our patients, and diverting our attachment, and alienating the mind from our profeſſion, may be applied here, with this

this addition, that the ſurgeon has not only a double duty to perform, but, inſtead of optional, as it was before, is now neceſſitated, from the nature of this additional commiſſion, to be more frequently with the officers.

Though an officer may be ſaid to ſpend an idle life, when compared to ſome other profeſſions requiring a greater exertion of the mental faculties, yet the duties he muſt keep himſelf in readineſs to perform, abſorb a great ſhare of his time. Parades muſt be attended; guards muſt be mounted; attention muſt be paid to dreſs; attention to the behaviour of the men; attention to their diſcipline; with many other things of this nature, known only to gentlemen of the army. * In the whole courſe of the day, there is very little time they can entirely call their own, *i. e.* they muſt never be far out of the way, and muſt be always in readineſs. The ſurgeon, in common with the other ſubaltern officers, if he enjoys an officer's commiſſion, muſt take his ſhare of this duty; indeed they will inſiſt on his taking it in turn. And, why ſhould he not, ſince he enjoys the benefits ariſing from it? The duties of a ſurgeon, which, in general, we may call of far greater magnitude, he

* I ſpeak here always of the foot ſervice.

muſt alſo perform. But here we find the ſame danger and temptation of having the mind alienated. The application neceſſary for the former is ſmall, when compared with what is abſolutely neceſſary for the latter; and the unhappy patients, we fear, will likewiſe have reaſon to regret it.

I remember to have ſeen an inſtance of this in a militia corps, where the ſurgeon, who was alſo an acting officer, was detached from the regiment with the company to which he belonged, on a ſeparate command, not in a medical, but a military capacity. A mate, in the ſame corps, has likewiſe two commiſſions: both may be detached at the ſame time on different ſtations. When this happens, what becomes of the ſick of the reſt of the regiment? Theſe commands may be longer or ſhorter, according to the nature of the ſervice: it may be, a day; a week; a month, &c. Suppoſe, on this occaſion, he could perſuade a brother officer to go in his ſtead, the commanding officer may not on all occaſions be inclined to allow ſuch change of duty; he may inſiſt, that the *roaſter* be regularly filled up, and every one take his turn. I have known a commanding officer refuſe a change

change of duty. His word is abſolute. Right or wrong, it muſt be complied with, without any attempt to reaſon on the ſubject.

In the regular ſervice, double commiſſions, of late, have been prohibited, perhaps for ſome ſuch reaſons as thoſe I have given. In the militia this practiſe is univerſally allowed. The reaſon given for it is, that as this ſervice is of a limited duration, for the war only, and ſurgeons there not entitled to half pay on diſmiſſion, a ſecond commiſſion is granted as a kind of recompence; and properly, if it was underſtood as a perquiſite; but, we apprehend, not for the good of the medical part of the ſervice, in the manner things are at preſent conducted. No two profeſſions whatever are more oppoſite in their natures, than that of a military and medical gentleman: the reaſon has already been pointed out. We all know, that the engagements of an officer require not much ſerious reflection; the medical man's duty requires it almoſt conſtantly.

If it is thought improper in the regular, may we not with propriety aſk, why it is continued in the militia ſervice? Have the ſurgeons there leſs to do in a medical capacity than the ſurgeons of the regulars?

In place thereof, we ſhall find, on enquiry, the contrary, ſince the militia regiments are, in general, *ſtronger* than the regulars, *i. e.* more numerous; and it muſt follow, that, in proportion, there will be more ſick. The regular regiments are ſeldom compleat; the militia are, for the moſt part, compleat; becauſe they can oblige the county to procure the complement of men, while the regulars muſt recruit by ſlow degrees, and by chance, at various diſtances and diſadvantages. Although theſe are confined to England alone, while the regulars are obliged to march wherever the ſervice requires, yet England is as much ſubject to diſeaſe as many other parts of the Britiſh dominions. Intermittents, and other febrile affections, rage in many parts of it endemically, as much nearly as in Holland. The militia are ſubjected both to camp and garriſon duty, equally with the regulars, and, therefore, as liable to camp diſeaſes; and theſe have, we know, often appeared among them, with all the violence they are generally obſerved to produce. * The venereal diſeaſe, that great plague of the army, is not found leſs frequent in England than in moſt other parts

* Vid Oeconom. Obſ. on Mil. Diſ.—1764.

parts of Europe. Do not all theſe call for a ſteady and regular attention, which cannot be ſo well given by a ſurgeon whoſe mind and time are divided between two profeſſions, ſo oppoſite as theſe to each other?

I would not be underſtood, by what I have ſaid, as taking from the militia ſurgeons a perquiſite, if this ſecond commiſſion is to be conſidered as ſuch. If it be thought, that a ſurgency of militia, on the ſame footing with the regulars, is not an equivalent to the other's chance of half-pay, let ſome other ſcheme be deviſed to make up the deficiencies; or, if this is ſtill to be continued, let it be underſtood as a *ſinecure*, and no duty required from the ſurgeon to call his attention from the ſick. It may be eaſily ſo regulated, that the duty ſhall fall on the reſt of the ſubalterns, in the ſame manner as we find it among the regulars, when any of the officers are on the recruiting ſervice. In this way there can be no objection to the augmentation of his pay, by an enſign's or lieutenant's commiſſion; for, I have been of opinion, ever ſince it was my lot to be acquainted with the ſervice, that the regulations, in this reſpect, of the regimental medical practice, I mean in as far as relates to pay, is neither adequate to the trouble of the

office,

office, the expences of a liberal medical education, or, what is of equal conſequence, is not ſuch as to encourage men of any profeſſional abilities to enter into it. Till regimental practitioners are placed on a more honourable footing, and their rank promoted, as well as their pay encreaſed, few, who deſerve the name of dical practitioners, will engage in it. According to the ſyſtem now in uſe, it matters not what their abilities are. The literate and illiterate are equally rewarded, or, more properly ſpeaking, not rewarded at all. Since merit here can ſeldom diſtinguiſh itſelf, ſome other aids ſhould be called in; and theſe ſeem to be rank and pay, the only things in the army that can command reſpect, or attention; and without theſe, his uſefulneſs can never be ſo great.

If a man, not only in this, but in any other walk of life, who truly from his merit deſerves attention, inſtead thereof finds neglect, it is apt to induce in him a real negligence; "he may deſpiſe thoſe who are to be his "judges, and ſlacken his endeavours, equally "indignant either of their applauſe or re-"proach."

I do not conceive the following opinion of the late eminent Dr. Hunter can apply to our

ſubject, though I am ready to allow it all due weight out of the army, and that chiefly from conſidering the nature of a regimental ſurgeon's ſituation, as already explained. He ſays, "An opinion, the child of ſpleen and "idleneſs, has been propagated, which has "done infinite prejudice to ſcience, as well "as virtue. They would have us believe, "that merit is neglected, and that ignorance "and knavery triumph in this world. Now, "in *our profeſſion*, it ſeems inconteſtible, that "the man of abilities, and diligence, *always* "*ſucceeds*. Ability, indeed, is not the only "requiſite; and a man may fail, who has no-"thing beſides to recommend him; or who "has ſome great diſqualification, either of "head or heart. But ſick people are ſo de-"ſirous of life and health, that they always "look out for ability; and, ſurely, the man "who is not really able in his profeſſion, "will have the leaſt chance of being "thought ſo. In my opinion, a young man "cannot cultivate a more important truth "than this, that merit is ſure of its reward in "the world."*

En-

* Vid. Introd. Lect. p. 102.

Encouragement, however, is moſt certainly the pabulum of genius; it keeps emulation alive. Juſt praiſe animates. There are few who have not felt this. To withhold it where due, is like froſt to the tender bud, which blaſts the hopes of ſpring, and brings an untimely deſtruction

CHAP.

CHAPTER V.

OF INTOXICATION—OF ITS GREATER CRIMINALITY IN THE SURGEON, THAN IN OTHERS OF THE CORPS.

In the army, where ſo much conviviality reigns, it will be ſaid, that to avoid intoxication, and even frequent intoxication, is no eaſy taſk. This however, I would, in a great degree, deny. I know, from experience, it may be avoided, whether by the officer or others; and, I am confident, it ought, on every occaſion, by the ſurgeon. We acknowledge, there is more temptation in the army to intoxication, than in ſome other ſituations of life, but it is not greater than what prudence and firm reſolution may overcome.

There are few vices that bring their own puniſhment more ſpeedily after them than drunkenneſs. Every man will, in general, be reſpected according to the reſpect he has for himſelf. A drunkard has none for himſelf, and, therefore, ought to be left by the world without any.—But, to proceed.

The ſurgeon generally meſſes with the corps: on this account, it will be ſaid, he may be more

more liable to temptation, and frequently compelled to drink more freely than he might otherwiſe chuſe; but I am unwilling to admit even this. Every man in theſe ſocieties, as far, at leaſt, as my knowledge or experience goes, may drink (particular occaſions excepted) either in quantity or quality, what he chuſes. Every man may likewiſe retire when he judges it convenient; for no perſon ſeems to take any notice, though all the company obſerve it. This is true politeneſs, and ſtrict good breeding. It muſt, however, be acknowledged, that all are not poſſeſſed of proper reſolution, or government over their inclinations, to make this good uſe of the latitude the company grant.

Though I have ſpoken thus far in favour of the good breeding ſubſiſting in the army, yet, I muſt own, there is, though not a direct, a ſtrong indirect temptation to lead us into this vice, *i. e.* the hilarity that always ſubſiſts among a number of gentlemen, ſuch as meet together at a meſs; the pleaſantry that paſſes to and fro among them, where every one contributes his ſhare to enliven the hour; good wine, which produces good ſpirits, even among the dull and phlegmatic; together with

uſe,

uſe, which improves the reliſh for liquor: theſe, I ſay, are temptations, which even the moſt guarded are not always able to reſiſt—glaſs after glaſs paſſes, and one ſally of wit after another flies round the table, which inſenſibly ſteals away our time, while the liquor itſelf never fails, in proportion, to ſteal away our ſenſes!

"Of all vices," ſays the author of a ſhort eſſay lately publiſhed in a morning paper, "take heed of drunkenneſs. Other vices "are but fruits of diſordered affections; this "diſorders, nay baniſhes reaſon. Other "vices but impair the ſoul; this demoliſhes "her two chief faculties, the *underſtanding* "and the *will*. Other vices make their "own way; this makes way for all vices. "He that is a drunkard is qualified for all "vice.

"Many a ſoul, with great difficulty, lugs "on a wretched and worn-out carcaſe to its "daily rendezvous, who, perhaps, for many "years, has been nothing elſe but the vint-"ner's conveyancer, to carry his liquor be-"tween the *tavern* and the *wall*."

An officer may ſit undeſerving of reproach, and enjoy his company, provided he does not

ſit

ſit till intoxication overtakes him. His duty is at regular, ſtated periods; he knows when his turn comes, and will be prepared accordingly for it: beſides, it is of that nature which neither requires, nor enjoins much abſtinence. But it is far otherwiſe with the ſurgeon: his duty is at no ſtated hour; he is liable to be called out on all occaſions; it may be, for aught he knows, the next moment. Should he be found incapable to perform it from drunkenneſs, I know of no puniſhment in the catalogue of martial laws too ſevere for him. Or, ſuppoſe he ſhould not be called out from company, but left to retire of his own accord, when he finds himſelf growing intoxicated, he may, at this very improper time, through a ſort of half recollection of what he intended in the hour of ſobriety, viſit ſome of his patients; may attempt to compound them medicines; and, in this ſtate of ſound judgement, commit eſſential miſtakes. I have known accidents ariſe from this ſource, though, I thank heaven! never any of a ſerious nature. Yet, from the probability that ſuch *may* take place, I am juſtifiable, in an eſſay of this nature, in mentioning it.

I re-

I remember once to have ſeen a brother of the profeſſion, in a ſtate of too much elevation from wine, unluckily apply ſo large a quantity of ſach. ſat. as a repellent, to a perſon's groin, where a trifling excoriation, from too much walking and the heat of the weather, had happened, that the conſequence was a gangrene, which could not be removed without conſiderable trouble, and even, for ſome time, rendered the patient's life doubtful.

In the beginning of 1783, I met with an account of a melancholy accident from intoxication, which, though it does not reſpect the faculty, I may be allowed to relate, as it is a farther proof of the pernicious effects of this vice, in thoſe to whom any truſt is committed. This accident happened in the hands of a nurſe to a lying-in woman. About ſeven days after the lady had been brought to bed, the child grew ſomewhat indiſpoſed. The phyſician was therefore conſulted, who ordered it a doſe of gentle phyſic. It was the nurſe's buſineſs to adminiſter it. Unhappily for the infant, ſhe was intoxicated, and, in place of giving the medicine put into her care, in this ſtate of inſanity, ſhe gave the child a doſe of oil of thyme and laudanum, which had been

prepared for an application to a bruiſe. The tender babe, as might reaſonably be expected, could not long ſurvive ſo fatal a potion. May we not aſk, whether an intoxicated preſcriber would not have been as apt to commit an overſight in compounding medicines, as an intoxicated nurſe in adminiſtering them? In this ſtate they are both equally deprived of ſound judgement, and, therefore neither of them to be implicitly depended on; but, ſhould they voluntarily bring themſelves into this condition, it would ſeem but juſtice to the public, to make them anſwerable, when ſober, for their errors.

A proper degree of puniſhment might be followed with happy effects in preventing thoſe to whom public truſts, of ſo material conſequence to the happineſs of individuals, are committed. With reſpect to it among army ſurgeons, not only individuals, in this way, may ſuffer, where theſe are found addicted to this vice, but the public ſervice; and, therefore, the puniſhment would ſeem to demand even a higher degree of ſeverity.

I have heard it urged in commendation of the abilities, as it is expreſſed, of certain perſons of the profeſſion, both *in* and *out* of the army, that

that they preſcribed beſt when half drunk; nay, I have met with thoſe who contended for the truth of it. Such commendation, however, is the effect of ignorance—it ſhould be reprobated—it is miſplaced praiſe, and may ſometimes prove injurious to the welfare of ſociety. Will any man be ſo hardy as to maintain, that a madman can perform what requires the united force of reaſon and experience? Can a man deprived of his reaſon coolly ſit down, and give rational judgement in matters of life and death? and are not the inſtruments of this ſort immediately in the hands of a preſcriber, by his prudent management of which, he may reſtore health, but by his imprudent uſe do much evil, if not even induce death? But the preſcriber has not in this moment, when his aſſiſtance is called for, that ſhare of reaſon left which the part he is about to act requires. No man, I am confident, would be ſo regardleſs of his own ſafety, as to truſt his barber in the ſame condition. Is it becauſe a ſurgeon knew ſufficiently well how to adminiſter medicines when ſober, that he can do the ſame when drunk? If we were afraid of our throats in the above caſe, we have ſurely no leſs reaſon to tremble for the conſequences

in this. The ſimilitude may be called coarſe, but it is *certainly* appoſite. Every one knows that ſeveral of our moſt valuable medicines are poiſons, and ſome of them both ſpeedily active and fatal, in improper doſes *.

Chance may, for a time, guide the hand of the one aright; and the other alſo may, in one of thoſe drunken moments, happen to make up a good compoſition. To ſuppoſe this, is juſt within the verge of poſſibilities. None, however, will undertake to aſſert, that the ſame will repeatedly take place under the ſame circumſtances. If this mode of reaſoning be convincing, which, I flatter myſelf, it is, at firſt view, I hope none will be found hereafter ſo imprudent as either to maintain, that an intoxicated phyſician or ſurgeon can perform the duties of his employment ſo well, much leſs *better* than when ſober, or to truſt themſelves under his care at ſuch a time, if they can avoid it.

To praiſe a medical man for his ſagacity, and diſcernment in his profeſſion when drunk, is certainly the ſevereſt ſatire on him we can employ, and reprobates him in the moſt pointed

* Moſt medicines, indeed, are poiſons, though all poiſons are not medicines, as an ingenious author has expreſſed it.

pointed and forcible terms. The opinion of the ingenious Armſtrong, reſpecting people in this condition, is very far from ſuch ill-placed praiſe—Hear him on the ſubject---Speaking of drunkenneſs, he ſays,

" Or in the rage of wine your haſty hand
" Performs a deed to haunt you to your grave."

Here he points out, how likely a man in this condition is to commit what he may repent to the lateſt hour of his life. He continues—

" Add, that your means, your health, your parts decay;
" Your friends avoid you; brutiſhly transformed,
" They hardly know you; or if one remains,
" To wiſh you well, he wiſhes you in heaven."

ART OF PRESERVING HEALTH.

Caution and accuracy, eſſentials in the profeſſion, we cannot in this condition expect.

A perſon lately talking on this ſubject with me, declared as a fact, that in a certain late practitioner, a man of conſiderable judgement when not inebriated, this vice was ſo conſpicuous, as frequently to give juſt alarm to the apothecary who compounded his preſcriptions. So addicted to it did he become, that, in viſiting patients, he would re-

fuſe to preſcribe till they brought him liquor. The neighbourhood entertained an high opinion of his abilities, and ſcrupled not to make the ſame apology for him we have alread ymentioned—that he preſcribed beſt when almoſt intoxicated. In part, we may here allow, this might be fact; for, perhaps, till he had drank a certain quantity, to give ſome ſtimulus to his cold and languid nerves, he was unfit for any thing, as moſt habitual drunkards are. Lo, the conſequence! every day the cup muſt be encreaſed to produce the ſame effects. His apothecary, who, I am told, was a man of diſcernment, and who entertained a friendſhip for him, has called on him after a fit of his intoxication, and ſhewn him, in confidence, the preſcriptions he had written while inebriated.—He has ſtarted when he read them; and, my informer adds, has bleſſed God, and thanked the apothecary, that they had not been ſent to the patient.—The example being thus held up, we hope, may deter others from an imitation, and prove as a beacon to prevent them from ſplitting on the ſame rock, or falling into this dangerous error beyond the bounds of moderation.

That

That perſons in liquor, without heſitation, have done what would puzzle others as well as themſelves, nay, what they would have refuſed to attempt when ſober, I grant. Liquor gives an irregular flow to the ſpirits, which produces raſhneſs; but this is the very thing againſt which we have been ſo bitterly inveighing. Something may be done *now*, and, by *chance*, even *happily* done, which ſobriety would have been cautious in undertaking. Perhaps the following fact may apply as an example. The reader may rely on its truth.

A gentleman of the profeſſion, an acquaintance, went, at my requeſt, one evening, in autumn, 1781, to ſupply my place, in delivering a woman, particular buſineſs obliging me to leave her, though then in a critical ſituation. It ſo happened, that he had this day made ſomewhat free with the glaſs; yet not ſo much, in my opinion, as to incapacitate him for this or any profeſſional duty. It proved to be a footling caſe. He ſet about it without heſitation, or once reflecting, that it was proper to bring down the arms into the birth before he proceeded to deliver. Notwithſtanding this, the woman

was ſafely brought to bed, without the leaſt accident either to herſelf or child. In moſt caſes, both arms of the infant might have been broken, or ſome accident might have happened to the mother; or, from neglecting to turn the child in a proper poſition to allow the head to paſs the pelvis with the moſt eaſe, other miſchiefs might have enſued. That ſome or all of theſe did not take place, ſeems to be owing to nature, who, in this woman, had fortunately formed the pelvis, &c. of a larger capacity, and the child ſmaller, than common. She knew nothing of the danger of her eſcape, but concluded the buſineſs done with the greateſt judgment; and next day, on my viſiting her, beſtowed large encomiums on the accoucher I ſent.

So it fares with others. If a man, during the effects of the glaſs, ſhould chance to ſucceed in any part of his profeſſion which he undertakes, his employers will call him in again, whether drunk or ſober. The gentleman I allude to in the above caſe, was ingenuous enough to tell me of it, and blame himſelf for the raſhneſs of his attempt, and the danger he ran of doing miſchief while ſo heated with wine; nor will he be offended to ſee it held

up

up here, as a *caveat* to others. Perhaps we conduce to the progreſſive improvement of our profeſſion as much, if not more, in confeſſing our miſtakes, as by publiſhing our ſucceſs. The quack, to vend his noſtrum, trumps in every newſpaper thoſe caſes where accident has rendered it ſucceſsful; but as cautiouſly avoids telling the world the many *hundred lives* it has deſtroyed.

As the colonel is the head of the corps, the father of the family, ſo to ſpeak, or, in his abſence, the lieutenant-colonel, or major, it were well if whoever of them poſſeſſes the command, would take this ſubject under their more immediate conſideration. A ſoldier is ſeverely puniſhed for drunkenneſs; why not extend it to other departments, where its miſchievous effects may prove even of more magnitude? The vice in this department, as we have endeavoured to ſhew, may be followed by more unhappy conſequences than may follow from the drunkenneſs of a private ſoldier.

Something of this nature might, perhaps, deter them from it, viz. that for every offence of this ſort, *i. e.* for every time they were intoxicated, they ſhould forfeit a certain num-

ber of days pay, to be added to the fund for ſick wives of the ſoldiery before mentioned. A fine ſhould, in like manner, be exacted from every one of the corps, who ſhould by any means, *directly* or *indirectly*, endeavour to render the ſurgeon intoxicated *. Fines, of a pecuniary nature, are exacted from ſtudents at ſeveral of the univerſities, for non-conformity to the rules of theſe literary inſtitutions. Perhaps they might be found to anſwer in the army, and compel compliance with ſuch a law as we have here hinted at; beſides, they will be able to exerciſe more œconomy, if leſs be ſpent in liquor, a matter of no ſmall importance to ſurgeons and ſubaltern officers.

I was told, ſome time ago, of a militia ſurgeon, during the late war, whom the colonel diſmiſſed for this very vice. Nor could he have been caſhiered on a more juſtifiable plea. If it was well founded, the colonel deſerves the higheſt praiſe for depriving him of

* It happens ſometimes that in the army ſchemes are laid, by the younger and more giddy part of the officers, to intoxicate one another for *fun*, as they call it. It is not to be expected all the officers of a regiment are endowed with ſtrict abſtinence. Inclinations are as various as faces; and where this coincides with temptation, it will frequently overcome the weaker reſtraints of virtuous principles.

of a ſtation he ſo unworthily filled, and where he had it in his power to do ſo much miſchief. It is remarkable, however, of the young man I am now hinting at, that only a few years before, when he entered the ſervice, he was noted above others of the corps for his ſobriety *. This will prove what the power of habit and example can produce.

The effect however produced by early example ſometimes, though we fear rarely, induces contrary habits. Take the following facts as illuſtrations. A gentleman, both of whoſe parents had been ſo much addicted to this vice, as not only to deſtroy the domeſtic peace of the family, but alſo nearly to diſſipate a very handſome property, determined, at a very early period of life, to avoid this pernicious habit. So early did he begin to put his reſolution in practice, and ſo ſtrictly, for near thirty years, has he adhered to it, that he does not recollect ever to have taſted any kind of ſpirituous or fermented liquor. Though a man of very good underſtanding, and without any reaſon to doubt his own determination,

* This I cannot abſolutely aſſert as a fact; yet my informer was an officer formerly of the regiment, and now of the regulars, who had a good opportunity of knowing the circumſtance.

determination, yet he has never for a moment broken through his original plan. We may add, that he has never been a ſingle week confined from general diſeaſe during the whole courſe of his life.

A man who was in the continual habit of drunkenneſs, had his intellects ſo debaſed, that he even derived pleaſure from ſeeing his children in the ſame ſtate in which he fancied ſo much happineſs to conſiſt. He frequently made them partake of his beloved liquor, till they were often nearly killed by it. They were at this period very young; but as they grew up, they became remarkable for ſtrict abſtinence, and averſion from liquor of all kinds, through an abhorrence of what they remembered in their father.

Among the catalogue of bad habits, none, perhaps, is more eaſily contracted than drunkenneſs. A medical man cannot plead ignorance of the pernicious effects of ſpirituous liquors on the conſtitution, when uſed to exceſs: he knows well the great complication of evils they will produce on the different organs of the body; and he has this confirmed almoſt daily by the bad health, and many days of prolonged miſery they have brought on many of his acquaintances.—Hear the opinion

of

of a learned, and juſtly celebrated phyſician on the ill effects of wine on the health.—"Wine," ſays he, "when immoderately uſed, "is to young people, what manure is to vege-"tation, which haſtens the progreſs of the "fruit, but deſtroys the plant. Wine uſed "in early life is a poiſon. It undermines all "the principals of man, exhauſts his powers, "deſtroys the faculties of his mind, and ex-"cites vomitings, fevers, phrenzy, madneſs, "convulſions, apoplexy, and ſometimes even "death. It is the general effect of wine to "enervate the ſyſtem by ſlow degrees, if men "habituate themſelves to it in too great a "quantity, and very often to terminate in "dropſy, more commonly, however, it pre-"diſpoſes to inflammatory diſeaſes, to gout, "aſthma, dropſy, and apoplexy *."—He might have added a number of other complaints to his catalogue.—Not only hepatic complaints, loſs of appetite, &c. from a thickening of the coats of the ſtomach, but even loſs of virility. Bacon tells us he has ſeen the ancient opinions of the effects of wine on generation confirmed by experience. It

* Vid. Zimmerman on Experience in Phyſic. Vol. II. p. 209.

It is his opinion, that great drinkers loſe their virility.—I have ſeen the ſtomach of a drunkard diſſected in a public anatomical theatre, where the profeſſor demonſtrated the coats of this organ to be thickened a full inch. Among the heathens, we are told, he was accounted the beſt man, who ſpent more oil in his lamp than wine in the bottle.

I ſhall now lay before my reader the opinion and admonition of a ſenior officer on this very ſubject, who has publiſhed ſome of the moſt uſeful advices to officers in general that have hitherto fallen in my way. I fear his book is too little known, and too little read, among the military. It will apply to all ranks of men, and therefore cannot be improperly introduced in this place.

" How many men," ſays he, " have I ſeen " ſo addicted to this vice, that, in the morn- " ing, they could not lift their trembling " hands to their heads, write their own " names, however neceſſary, or hardly give " a rational anſwer, until they had made " themſelves half drunk again! It is truly a " miſerable reflection, to think that men " ſhould reduce themſelves to the neceſſity " of repeating the crime by which they have " drowned

" drowned their ſenſes, and deſtroyed their " faculties, in order to be able, in a wretched " degree, to make uſe of that little reaſon and " ſtrength they have left themſelves.

" I know it may be objected, that ſeveral " men have been great ſots, and yet have " preſerved their ſenſes and ſtrength to a good " old age. To this I anſwer, that one ſwal- " low does not make a ſummer; and that " though there are a few that this happens " to, yet are there infinitely greater numbers " who have met with a contrary fate. But, " allowing it ſhould not be hurtful to the " conſtitution of ſome, is that any reaſon it " ſhould be practiſed by all? Some men have " taken poiſon, or picked a pocket with im- " punity: ſhall I therefore cut a purſe, or " ſwallow mercury? This argument is cer- " tainly inconcluſive; but, abſtracted from all " this, I have another reaſon to offer to mili- " tary men, eſpecially ſubalterns, who have " no other income to help them but their pay. " Drinking cannot be purſued without great " expences. Now, where is the fund to en- " able them to do this? Their pay, with all " the œconomy they are maſters of, cannot. " They muſt, then, be guilty of practices I

" am

" am a ſtranger to, or run into debt. If the " firſt is diſcovered, they are diſmiſſed the " ſervice with ſhame; if the laſt, they are " unable to pay: they muſt ſell their com- " miſſions, and ſo part with the only means " they had of living; and all this rather than " break off in time ſo beaſtly a vice."

He proceeds conſiderably farther inveighing againſt it, and particularly points out the pernicious effects of dram drinking in a morning; a vice he had nearly fallen into from the example, and even *advice*, of two ſenior officers (he having not long before entered the army) who took him with them at their *meridian hour*, under a pretence of its getting him a ſtomach for his dinner; and then mentions his timely eſcape, which he relates at length, as a leſſon to others.

We have ſaid before, it is cuſtomary in the army for the ſurgeon to meſs with the corps. I am rather inclined to think, it would be a better plan if he was not to meſs with them, the better to eſcape this temptation. If he was excluded for this reaſon, or choſe to exclude himſelf, unleſs occaſionally, no officer would treat him with the leſs reſpect. On this head, however, I am cautious of ſpeaking,

ing, leſt my brethren of the military medical profeſſion ſhould think me too particular, and over rigid in my regulations. I am certain of one thing, they would live much cheaper, nor yet be leſs happy. When I firſt entered the ſervice, I abſtained, almoſt totally, for ſome time, from the company, I mean the convivial company, of the officers. Some looked on it at firſt as abſtemiouſneſs, and parſimony; others did not heſitate to attribute it to pride. When it came to my knowledge, I related to them the cauſe that deprived me ſo frequently of their company, viz. that having then on the liſt a number of patients, it occupied moſt of my time to conſult books, and preſcribe for them; this was the footing I put it on, which, in a great meaſure, was the fact; though, to avoid temptation, was likewiſe a part, but a part which I thought it then imprudent to confeſs. They revoked now their former opinion; and, I am confident, that from this alone, I gained the eſteem of ſeveral, who might have thought differently of me before. Though I never after this abſtained from the company of officers, when occaſion required, I never to this hour courted it; yet few of my ſtanding,

perhaps, ever received greater marks of civility from a ſet of officers, during the few years I lived among them. I place not this to my deſerts, but to the good diſpoſitions of my fellow officers, and mention it as a farther illuſtration of the doctrine I have now delivered, and would wiſh to ſupport.

CHAP.

CHAPTER VI.

OF THE MEDICINES, AND THEIR DOSES.

THE medicines allotted for the privates, are not, we fear, always kept either in proper quantity or well choſen. On this head the officers, for the moſt part, complain grievouſly. There is, at leaſt in ſeveral regiments, if I miſtake not, ſome reaſon for their murmurs. We have pointed out already* what each private pays towards a fund for a medicine cheſt. The ſum is more than ſufficient for the purchaſe of medicines of the beſt quality, as well as variety, for the number of ſick of a regiment. The ſurgeon is always allowed medicine money for the full eſtabliſhment of the regiment: when the actual number is ſmall, which is often the caſe, the ſick are in proportion fewer, which muſt ſave both medicines and money.

The money has never been found entirely exhauſted, even in the moſt ſickly ſeaſons, when the regiment has been numerous, and the men well ſupplied with medicines; on

* Vid. Introduction.

the contrary, it will appear, that not a third of it is expended for this end, in regiments where moſt complaints called for it, and where the ſurgeon could not be accuſed of acting niggardly. At an average for four years, the money applied to this uſe, in a regiment where I had an opportunity of knowing the fact, did not amount to much above twenty guineas a year, though, for a great part of this time, it was upwards of ſix hundred ſtrong. The ſum allowed for one year by the late eſtabliſhment in this corps, was eighty pounds nine ſhillings, as we have ſhewn by a calculation already made.* Nay, I ſhould be nearer the truth did I ſtate the medicines at an average much lower.† It is natural, then, to enquire, what becomes of the reſt?—the anſwer is obvious—it goes as a perquiſite to the ſurgeon. Is there not a perceptible error here? Does it not ſeem improper to rob the poor ſoldier of the pittance which government allots him, in order that it may become a perquiſite of office to one who has his ſtipulated pay? When the ſoldier is ill, by this management,

* Vid. Introduction.—The late regulation and peace eſtabliſhment has reduced it to 70l. a year.

† About ſixteen guineas a year.

ment, little or nothing is left for the purchaſe of medicines ; and too often as little offered. This reflection I ſhould be ſorry to extend to all the army. I am convinced there are many in the ſervice whoſe humanity and conſcientious care of their patients are as exemplary, as their education and abilities in their profeſſion are reſpectable ; but I know aſſuredly, alſo, that there are many palpable abuſes in this part.

But the error lies partly in government, by allowing the ſurgeon to have the management of this money ; and partly in his ſcanty pay. We have given it as our opinion already, that the nation has dealt very partially with the ſurgeon, not only in what reſpects his pay, but his rank. His ſubſiſtence is mean, and inadequate to his ſervices. Let me not, therefore, throw indiſcriminately any ungenerous reflections on my brethren of the profeſſion. Their minds, I would hope, are far ſuperior to any ſordid views ; but ſince they are placed in a ſtation ſo expenſive, and on a ſtipend ſo contracted, ſo greatly inadequate to their neceſſary expences, to ſave for their own uſe what can be conveniently ſpared from the medicine money, is not culpable in them : it

is only wrong when theſe bounds are exceeded. Poverty is one of the greateſt temptations to the commiſſion of frauds: and here, too, it is found to do evil. We know, that in regimental practice it often happens, that only ſome of the cheapeſt and coarſeſt articles of the materia medica are kept in the medicine cheſt. But another error, for which we cannot offer ſo good an apology, is, that even when it is proper to adminiſter any of theſe, they are ſeldom prepared in a way that can ſecure their efficacy, or enſure their ſucceſs.

It is well known, that as much art and knowledge is often neceſſary in preparing a medicine, and uniting it with proper vehicles to make it ſit eaſy on the ſtomach, as in finding out what claſs of medicines to exhibit. We are obliged, very frequently, to ſtruggle with delicate habits, and irritable ſtomachs, formed ſo by nature, and now doubly ſo by diſeaſe. How often, in ſuch caſes, do we find it expedient to vary our formula, without eſſentially changing our medicine? On other occaſions, it muſt be altered almoſt in every reſpect. If, for inſtance, our patient cannot take it in a liquid, we muſt contrive it in a more ſolid form.—

form.—One cannot take an electuary; another finds it difficult to ſwallow a pill: and thus are we obliged to comply with the various taſtes and antipathies of our patients. When he nauſeates one form, we muſt have recourſe to another; and ſo on, till we find one that will ſit eaſy, and otherwiſe anſwer our purpoſe. For, if a medicine be rejected as ſoon as taken, it can never prove of efficacy: thus will our intentions be fruſtrated. But, in the army, we cannot, for the moſt part, ſo readily adapt the medicine to the palate, becauſe we have few varieties to make a ſelection from.

It may be ſtill urged, notwithſtanding what has already been ſaid, that medicines here ſhould be of the cheapeſt ſort, as beſt agreeing with the fund for purchaſing them; and they may be allowed of a coarſe quality, ſince they are only for ſoldiers, men little accuſtomed to delicate living, or nice medicines; and that if the general tendency of operation be the ſame, the ſame effects, they will ſay, muſt unqueſtionably follow.

The firſt has already been anſwered, by ſhewing that the money is far from being all expended; therefore, better medicines may,

and ought to be purchaſed, where they are wanted, and the ſurgeon's ſalary augmented from a different fund. With reſpect to the other, I apprehend, it is likewiſe ſufficiently anſwered in a former chapter, by what was ſaid relative to a ſoldier's nice feelings.* For though he lives low, and fares badly, yet nature has often formed him with organs as nice, and as mobile as his richer and more delicately faring neighbour. And though it will be found, that there are in the ranks, men of very robuſt conſtitutions, capable of ſwallowing and digeſting any thing of the kind offered them, yet it will not apply to the generality. I have found men among the ſoldiery altogether as delicate, in regard to taking medicines, and thoſe even apparently robuſt men, as any officer in the corps; nay, with ſtomachs much more irritable. To ſuch perſons, a coarſe ill-prepared medicine is as bad as none, becauſe it cannot be retained: in place of proving ſerviceable, it may create new diſturbances, and, perhaps, occaſion much ſickneſs.

A practitioner may chuſe his medicines very judiciouſly, yet err greatly in the method of prepa-

* Vid. Chap. III.

preparation or exhibition. Hence one man's ſucceſs beyond that of another with the ſame medicine, by the difference alone of preparation or doſing. Suppoſe even both were to give the ſame quantity of the ſame medicine, the very time of exhibition will make a difference in many caſes, and prove the ſuperior ſagacity of the one above that of the other. From hence we may draw the following concluſion—that the ſame remedy, in the hands of different perſons, ſhall produce very oppoſite effects; the one will be able to relieve, the other only aggravate the complaint thereby. This may be ſaid alſo to belong to the penetration and genius of the preſcriber; but medicines being the medium he uſes to attain his purpoſes, if they be bad, he is defeated.

While, however, I contend for a better choice of medicines in regimental practice, I do not mean that the moſt expenſive are always neceſſary: ſubſtitutes, anſwering the end with equal propriety, may be employed in place of ſeveral of the more expenſive drugs, while, at the ſame time, they are not the leſs palatable or efficacious.

To

To form a diſpenſatory calculated for the uſe of regimental ſurgeons, might, probably, prove an uſeful work. In general, however, we may follow the plan laid down for paupers out of the army. We have ſeveral forms of pharmacopoeiæ pauperum, where though we find, that the abſolutely rough and ill-prepared medicines are excluded, yet ſeveral of a cheap ſort are admitted. It would be prepoſterous for a regimental ſurgeon to keep ſo dear a drug as muſk, or even caſtor, in his cheſt, when ſeveral cheaper of the anti-ſpaſmodic claſs are to be found, by which his intentions may be altogether as ſpeedily anſwered. At the ſame time, let no ſubſtitute be depended on when the patient's caſe may abſolutely call for a better, or where a protraction of the cure, for the want of ſuch, may be apprehended; for, in ſome caſes, we know not what a day may bring forth: this rule ſhould be laid down as fundamental—never to trifle with health for the ſake of ſaving a ſhilling. To do ſo is unjuſtifiable; and, in the end, will ſeldom fail to injure the ſurgeon's character.

With reſpect to ſome of the ſubſtitutes, he will find ſtrong decoctions of Lintſeed anſwer,

in

in many caſes, among the ſoldiery, as well as Gum Arabic, which is far more expenſive, at leaſt mixed with a ſmall proportion of the ſolution of this gum. Decoctions even of the common Malva, which he may gather almoſt every where, or of Marſh Mallow roots, when he can find them, will make drinks poſſeſſing all the qualities of more expenſive mucilaginous medicines. An electuary formed of the leaves of Cicuta, will have the ſame effects as the powder made from them: this plant he can gather at almoſt all ſeaſons, and every where, and thus ſave himſelf the expence of powder, and the trouble of preparing it.*

Thoſe chymical and galenical medicines which he cannot prepare himſelf, but muſt purchaſe from druggiſts, he ſhould be particularly careful in the choice of: theſe ſhould conſtantly be of the beſt quality. Let him remember, that there is no œconomy in buying drugs at the cheapeſt rate, ſince they cannot be genuine: his patient may be the longer on the ſick liſt, and his trouble encreaſed.

* I have found the uſe of this article of the Materia Medica very ſerviceable in a variety of caſes, internally exhibited, and externally uſed as a fomentation; and in poultices with coarſe flour or oatmeal.

creaſed. For inſtance, can he expect to buy Peruvian Bark at ſeven ſhillings and ſixpence the pound as good as what he muſt purchaſe at a druggiſt's, where genuine bark is kept, perhaps at as much more? A ſmaller quantity will not only anſwer the purpoſe better, but the medicine may be depended on, as far as bark can ſucceed in the caſe. Much of the diſrepute this medicine has fallen into of late is owing to the cheap and ſophiſticated bark practitioners uſe. We might make the ſame remark on ſome of the other medicines, among which is Rhubarb.

His unguents he ſhould prepare always himſelf, and likewiſe in ſmall quantities at a time; for, if long kept, they will prove rancid: beſides, he will find it neceſſary to vary the proportions of ſeveral of theſe to anſwer his intentions. If he buys them, he will generally find them too hard, becauſe, neither the college proportions are exactly kept, nor the ingredients themſelves always uſed. For inſtance, in the different fats and oils, the cheapeſt will always be uſed, ſometimes much to the detriment of the unguent. Where hog's lard is ordered, mutton fat muſt not be ſubſtituted. He will find lintſeed oil (unleſs

(unleſs for internal uſe) no improper ſubſtitute for olive oil, which is conſiderably more expenſive; but, for internal exhibition, the beſt ſallad oil ſhould conſtantly be employed.

Among the unguents, liniments, and cerates, he will find, perhaps, the following the moſt uſeful:* Linim. Simplex. Ceratum Simplex. Ung. Baſil. Flav. Ung. Epiſpaſt. Ung. è Ceruſa. vulgo Album. Ung. Saturnin. Cerat. è Lapid. Calamin. Ung. ex Erugine. Ung. Cœruleum. Ung. Antipſoricum. Perhaps even ſome of theſe may be diſpenſed with.—Among the emplaſtra, the Emplaſt. Commun. Emplaſt. Adheſiv. Emplaſt. Fœtid.—This laſt he will find more uſeful among the ſoldiers wives than among the men. In ſome ſtomachic ailments it may have its uſe even among the privates themſelves.—Emplaſtr. Veſicator. cannot be diſpenſed with.—He ſhould keep of the powdered Cantharides in his cheſt, and make his Ung. Epiſpaſt. occaſionally as he wants it. He can make it with more accuracy from the flies

* I have left theſe names as they ſtood in the firſt edition; for though in our preſent pharmacopoeiæ they are different, yet the index has preſerved the ſynonimes—there both old and new may be found.

flies than by mixing the Ung. Basil. Flav. and Emplas. Vesicat. together.

Among the pills he should keep the following: the Pil. Plumer. Pil. Pacifie. Pil. Stomach.—This last may have its uses among the women of the regiment, more than among their husbands; for he should not neglect them: nay, though his duty does not oblige him either to give them advice or medicines, his humanity may call on him. We must not omit Pil. ex Hydrarg. or the common Mercurial Pil—one which he will find more use for than any other yet mentioned. The Pil. Scillit. should also be kept: dropsies often occur, and this may have its use in the disease.

Among the electuaries he must not omit the Elect. Cardiac. vulgo Confect. Card.—this is a very elegant and useful composition. Elect. Japonic. vulgo Confect. Japonic. In diarrhœas, and the like, it is often administered with the happiest success.—Elect. Lenitiv.---Elect. Thebaic. is also an useful composition, and an elegant formula of administering opium, united with aromatics.

Among the powders, Pulv. Diaromaton, vulgo Species Aromatica: this is also a very

elegant compoſition, and of great uſe.---Pulv. è Jallap. Comp. he may make occaſionally as he wants it. As head purges may be found uſeful in removing ſome ſpecies of head-achs, the Pulv. Sternutat. may alſo be kept; nor muſt he neglect the Pulv. Stiptic. and, above all, let him be provided with the Pulv. Dover. ſive Sudorific.---Thus far of *compound* powders.

Among the *ſimple*, we muſt not neglect Rhubarb, and Jallap.---A few Syrups may ſuffice for army practice. Simple ſyrup will be moſt uſed; but, as it will ſpoil in keeping, a proper quantity of coarſe ſugar always at hand, for ſweetening draughts, &c. will anſwer as well as a more expenſive ſyrup of fine ſugar. I would not have him omit the Syr. Scillit.---A Syrup of Lemon Juice may be added, but, perhaps, there is leſs occaſion for it—it may, however, be compounded pro re nata, by diſſolving brown ſugar in water, and adding the lemon juice. I omit Syr. e Diacod. ſince other formulæ of opiates will anſwer as well.

Of the antimonial preparations the following will be ſufficient.---Firſt, as the chief, Tart. Antimon. vulgo T. Emet.---As

Vitrum

Vitrum Cerat. Antimon. has been found uſeful in dyſentery,* it may be kept; and as James's Powders are ſometimes an uſeful medicine, and the compoſition now known, they may likewiſe have a place.---If he chuſes, he may add the Vin. Antimoniale. It is not expenſive.

Among the mercurial preparations with the acids, comes Corroſ. Sublim. or Merc. Sublim. Corroſiv. Alb. The laſt edition of the Edinburgh Pharmacopoeia has given a formula for the ſolution, which is, Corroſ. Sublim. gr. vj. Sal. Ammon. gr. xij. ſolv. in aq. diſtill. libra una.---Mercurius Dulcis, or Calomel, is an uſeful preparation.---Alſo, Merc. Calcinat. and Merc. Precipitat. Alb.---This laſt will be found an uſeful ingredient in ointments for cutaneous eruptions.---Merc. Corroſ. Ruber: a moſt uſeful eſcharotic.† --- Of the preparations of ſilver, the Lunar Cauſtic.---Among his venereal patients he will frequently have occaſion to uſe this.---Of the dry preparations of lead, Sach. Sat.---Of the preparations of iron, Vitriol.

* Vid. Med. Eſſ. Edinb.

† Some think the common pill, made with crude mercury, may ſupply the place of all other more expenſive preparations for internal uſe. I have often found it neceſſary, to vary my formulæ, and hence I have mentioned different preparations.

triol. Mart. or Green Copperas, as it is commonly called.---Among thoſe of zinc, it will be as well to keep both the Flowers and Vitriol Alb. ſince neither are expenſive. The laſt is ſo uſeful, I hold it among the indiſpenſable medicines.---The Aq. Vitriolic. is alſo uſeful: this he can compound occaſionally. And ſo may alſo the Aq. Stiptic. have a place when he finds it neceſſary, as well as the Aq. Sappharina, if he has opthalmias wherein he may judge its application proper. Opthalmias are very common among the men, and I have often found them very troubleſome: they proceed from various cauſes---not uncommonly from a venereal one.

Among the neutral ſalts, Sal Glauberi and Sal Cathart. Amar. are the moſt uſeful: Sal Polychreſt. and Tart. Solubil. he may uſe occaſionally, if he chuſes. Neither the Vegetable fixed Alkal. nor the Volatile muſt be omitted. For the Foſſil Alkali he may find but little uſe.---Sp. Volat. Fœtid. Spirit Volat. Aromat. will likewiſe be uſeful; Spir. Vitriol. Dulc.* Sp. Nitri. Dulc. alſo Vinegar, both common and diſtilled. The Spir. C. C. with oil, makes a

 good

* Sp. Vitr. Dulc. has lately been uſed with great ſucceſs in fevers.

good liniment in the army for pains, and even ſprains. If made with coarſe oil, it anſwers ſufficiently well.---In place of ſpirituous waters, he will find it cheaper, and not leſs effectual, to uſe the eſſential Oil of Peppermint, or ſome ſuch : a few drops of this will communicate the ſame flavour as if he had made uſe of a large quantity of common diſtilled water from the ſame herb.

He will find ſeveral of the tinctures of high importance. Tinct. Amar. T. Aromat. T. Cinnamom. T. Cort. Peruv. T. Fœtid. T. Jallap, T. Japonic. T. Myrrh. T. Rhei. T. Theb. T. Senn. Compoſ. T. Ipecacuan. Elix. Vitriol. Acid. Linim. vulgo Balſ. Anodyn. and, if he pleaſes, he may add Linim. Sapon. as alſo Balſ. Traum. Elix. Guiac. Volatil.---He may add to theſe as many others as he ſhall think proper.---Acet. Scillit. is very uſeful. If he keeps theſe tinctures, the wines may be diſpenſed with.

Of the decoctions, the Decoct. Commun. and the Decoct. Hordei.---perhaps this laſt is ſufficient. I need not tell even the young and leſs experienced army practitioner, that theſe, and many others, are to be prepared as occaſion requires ; every one knows that ſe-

veral of them cannot be kept in a medicinal cheſt. As he muſt practice among the officers, the Decoct. Lignor. can be prepared, if he judges it neceſſary, for any of them. Sarſaparilla is dear, and, unleſs to officers, he may omit it in his pharmacopoeiæ. What medicines are ordered for them they generally pay for. Both the Common and Arabic Emulſion may be ſometimes neceſſary: neither of them is expenſive.—He may keep Mag. Alb. becauſe he will find uſe for it in the caſes of children.

Among the infuſions, that of Tamarinds and Senna may ſuffice. This he muſt alſo prepare pro re nata. The Mucilage of Gum Arabic will likewiſe be neceſſary both in forming pills, and mixing with other medicines, therefore he muſt never be without the Gum. I have found, in ſoldiers coughs, Lac Ammon. and T. Theb. an excellent remedy; therefore, the G. Ammon muſt be one of the articles of the regimental materia medica. Of the conſerves, that of roſes may be enough. Crem. Tart. muſt not be omitted; neither Manna, Sperm. Ceti, nor Sal Nitri. Of the aromatics, we may likewiſe add Nutmeg and Ginger, in powder. Likewiſe, both the root

of Liquorice, and the extract, *i. e.* what goes by the name of Spaniſh Juice. It will be proper to have Balſ. Copaib. Spaniſh Soap, Camphor; nor muſt we omit Fl. Sulph. Pulv. Heleb. Alb. and Crud. Sal Ammon. Theſe I have often uſed with great ſucceſs, in form of unguents, in cutaneous eruptions. I do not give theſe as a liſt of all the medicines he ſhould keep in his cheſt: ſeveral of them he can purchaſe in every quarters where they march to, as genuine as in London. Theſe, variouſly compounded, as his judgment leads, for which no rules can be laid down, will anſwer moſt caſes he may meet with. If he wants more, he will find enough of formulæ in pharmacopoeias. If he finds here ſome which he thinks he may never want, let them be omitted; but, the more of them he poſſeſſes, he will find his cheſt the richer.—Beſides theſe, Leather, old Cloth, Rollers, Tow, and Charpè, are to be added.

Every regimental ſurgeon ſhould poſſeſs two cheſts—one for his tinctures, and nicer preparations; the other for thoſe where leſs care in their keeping is neceſſary. The common cheſts in uſe in the army ſeem very well adapted: perhaps their conveniences cannot be

be improved. They appear, however, to be too ſmall. I could wiſh them at leaſt ſix feet long, with a proportional width and depth. I know it is troubleſome to tranſport from place to place, large and cumberſome baggage, ſuch as this will be, but I look on it as neceſſary as their cheſts of arms; and the commanding officer ſhould never find fault with a large medicine cheſt, though he may juſtly, ſometimes, with the officers, for too much *unneceſſary* baggage.

But now reſpecting the doſing of medicines in the regimental practice: this is a matter of the higheſt importance. In the army, however, I have obſerved far more negligence in this, than out of it. Want of convenience may, indeed, be pleaded. This I cannot, however, altogether allow. A careleſſneſs in exactly meaſuring the quantity of the more active ſubſtances will admit of no apology, ſince a very ſmall variation may prove hurtful. By a ſmall miſtake here, as the poet ſtrongly expreſſes it, we "may do a deed to "haunt us to the grave." We may inſtance it in Tart. Emetic. A quarter of a grain of an over doſe may add ſo much to the violence of its action, as to endanger the rupture of

blood veſſels. Ruptures of this kind taking place in ſome parts of the body, as in the brain *, may produce immediate death. We can eaſily ſuppoſe, that the ſtraining occaſioned by the efforts to vomit, may detain the blood in the veſſels of this organ in greater quantity; we know that the veſſels there are extremely numerous; that the ſtructure is delicate; that many of them lie looſe, at leaſt are envelloped in ſo tender parts, as eaſily to give way to an impulſe. Apoplexy proves that ruptures take place in the veſſels of the brain †. Pains in the ſpleen may likewiſe follow from violent vomiting, ſince this organ admits, in a ſimilar manner, a greater quantity of blood in proportion to the reſt of the body. The ſplenetic artery is frequently found diſeaſed, and, therefore, the more eaſily ruptured.

* Emetici actio violenta, ad capitis morbos gignendos apta nata eſt.—De Haen Rat. Med. pars prim. Contin. p. 185.

† Dr. Monro is of opinion, that not above a tenth part of the whole maſs of blood is circulated within the head, but which is nearly four times more than is circulated in the reſt of the aortic ſyſtem, when the area of the internal carotid, and vertebral arteries, are compared with the area of the trunk of the deſcending aorta.—See Obſervations on the Nervous Syſtem, p. 3.

ruptured. Whether its tortuoſity adds any thing to this, is difficult to ſay; it is, beyond queſtion, the moſt convoluted veſſel in the body, and is very ſubject to oſſifications. We know that violent running, which hurries the circulation, not only produces pains in the ſpleen, but in the liver. Violent ſtraining may exert a force on theſe productive of the evil we have mentioned; nay, I have heard a reader of anatomical lectures,* of ſome experience, aſſert, in his lecture room, he knew a caſe of a rupture of the veſſels of the ſpleen from the violence of emetics. Violent efforts to vomit have cauſed even a rupture of the œſophagus, and opened a communication between it and the abdomen: it was this that killed the Baron Van Waſſenaer, Admiral of Holland †.

Ruptures of the veſſels of the ſtomach have likewiſe proved fatal from the ſame cauſe. The death of the famous Voltaire was induced by an hæmatemeſis, and though not by a previous emetic, yet in a way ſomewhat ſimilar.—In the act of declaiming, and in

* Mr. Cruikſhank.

† Vid. Boerhaav. Opera.

violent agitation, inſtructing the actors who were to perform his tragedy of Irene, he was ſeized with a fatal vomiting of blood.

The late lieutenant-colonel D——, died from a ſimilar cauſe. He was a man of gentle manners, and remarkable in the corps where he ſerved for good nature, ſo that he went by the name of Good-natured D—. From various cauſes, and uneaſineſſes that befel him, his health was rendered precarious: he became valetudinary, and his temper changed with the weakened ſtate of his body, to very irritable and iraſcible.—In the beginning of April, 1785, from ſome previous vexation, a vomiting of blood came ſuddenly on—he fainted—the vomiting ſtopped.—Some officious perſons about him at the time, alarmed at this, and ignorant of the conſequences, gave him a conſiderable quantity of Sp. C. C. which, the inſtant it got down, induced again ſuch an effort to vomit, that, perhaps, more than a pound of blood came up at once.—He was now placed in an horizontal poſition, and, apparently, almoſt dead; but, by proper care, he recovered ſo well, in about ten days, as to be able to go abroad. I predicted that

a dropſy would moſt likely enſue, from the loſs already ſuſtained, and made this my reaſon for objecting to V. S. which was then propoſed by one of the gentlemen who attended with me, and who had been preſent at the evacuation of the laſt quantity of blood occaſioned by the injudicious exhibition of the Volat. Sp.—They yielded—no more was taken away—but, in a very ſhort time after, the abdomen became evidently enlarged.—This daily encreaſed—and, in the ſpace of about two months, after being tapped, and a quantity of water drawn off, he died.—This caſe comes in as a nearer example; for, the effort of vomiting, wherein the laſt quantity of blood was loſt, might be held as a principal cauſe of the fatal event. From the loſs of the firſt, the patient might have died *dropſical*, or by ſome other *lingering complaint*, but, from ſo ſudden, and ſo great a loſs, added immediately to the firſt, it was impoſſible he could long ſurvive.

In June laſt, I was called to a young lady in the neighbourhood where I reſide, who had been long valetudinary, but, for three days before, had been almoſt conſtantly vomiting, from a morbid irritability of the ſtomach, which

which not only alarmed her friends, but the ſurgeon who attended and myſelf. She had not indeed vomited much blood—what came up was in ſtreaks, but ſufficient to make us apprehenſive, if we could not allay the inordinate action, that a rupture of ſome of the larger veſſels might enſue, and a fatal hæmorrhage take place—but our endeavours to appeaſe it, thank Heaven! were crowned with ſucceſs. In little more than a month after, ſhe was reſtored to perfect health.—Theſe are examples to ſhew the alarming tendency of long-continued and violent efforts to vomit, in whatever manner induced.

I ſhall mention another example. A perſon who had been cahectic for ſeveral years, but not ſo much affected as to be prevented from doing the duties of his ſtation, which was that of a ſervant, was ſeized with febrile ſymptoms. The ſame day he had been engaged in buſineſs that expoſed him to conſiderable degrees both of heat and cold, united with moiſture: that night he was very reſtleſs, the fever increaſed, which had been preceded by a ſtrong degree of cold ſhivering, with his cough augmented, and pain in the breaſt.

No

No medical advice was had recourſe to till the next evening; then it was judged neceſſary to give him an emetic: the operation of this was more violent than was intended, and continued during the remainder of the day and that night; during which time he threw up ſome quantity of blood, which appeared to be the effect of violent ſtraining: the operation downwards was not leſs than that upwards, ſo that it left him in a weak and debilitated condition. Pain and ſinking, as the patient expreſſed it, was now felt in the region of the ſtomach; this was ſucceeded by diſpnæa to ſuch a degree, as nearly to produce ſuffocation. For ſome minutes theſe fits, each of which continued more than a quarter of an hour at a time, were frequently reiterated, while not only the countenance, but the lower and upper extremities, appeared black from the ſtoppage of circulation and inability of inſpiration, rendering it doubtful to the by-ſtanders whether he could recover.

The fit generally went off by an expulſion of flatus. From the beginning of the diſeaſe till the third day, no food of any kind had

had been taken, and the irritability of the ſtomach by the emetic had been rendered great. When he had ſtrength to cough, large quantities of mucus, thick and ropy, tinged with blood, and deeply yellow, were thrown up, proving that the ſecretion of the liver had been much diſturbed, and the bile regurgitating into the ſtomach, inſtead of its natural paſſage downwards.

It would appear, as I have already ſaid, that great part of this was induced by the violence of the emetic. Had it been ordered *partitis vicibus*, and as ſoon as the operation began, deſiſting from giving the remainder of the potion, the above ſevere effects might have been obviated.

The gentleman who gave this emetic had been led into the miſtake by his obſerving, that a draught of a ſimilar kind, which had been given ſome months before to the ſame perſon, had not operated by the mouth, but run off by ſtool; and concluded thence, that a larger portion was neceſſary now to produce the deſired effect. Though this example is not ſo ſtrong in point as ſome I have already related, yet it will prove the degree of circumſpection neceſſary on ſuch occaſions.

But

But ſhould ſuch ſerious and fatal accidents not happen as we have deſcribed in ſome of the above caſes, troubleſome hæmorrhages may follow, which, though not attended, with ſo much danger, may diſturb and frighten the patient. Should only ſome of the veſſels running through the ſneideirean membrane be opened, it proves unpleaſant, perhaps, ſometimes, even hazardous. I have repeatedly ſeen violent hæmorrhages at the noſe during the operation of an emetic. Such accidents never fail to deter the patient, in future, from the uſe of emetics, be their adminiſtration ever ſo neceſſary.

I have ſometimes ſeen this active preparation of antimony dealt out at random, being carried in a ſmall phial in the pocket, and adminiſtered by gueſs, without the trouble of weighing. A very little pains might have prevented this unſafe method of uſing it, *i. e.* by having always a number of accurate doſes previouſly weighed, wrapped up, and kept in the pocket, till occaſion called for them in viſits to the ſick in quarters. Theſe could as eaſily be carried about to ſave an immediate journey back to the ſurgery, as a phial, and with much more ſafety in the exhibition. But,

even

even in this way, it will be ſafeſt to direct it to be diſſolved in a certain quantity of water, and taken *partitis vicibus*; for, according to the ſtrength of the T. Emet. then in our poſſeſſion, and the quantity of acid on the ſtomach, will its action be either greater or leſs. The ſame method may be uſed with jallap, *i. e.* having the doſes weighed; and the ſame ſtill with ſome other active medicines, which I have ſeen, too often, in the army, adminiſtered in this vague and random way.

If, in this *gueſs method*, through fear of giving too much, we give too little, the effects we intended cannot take place; and either time is loſt, or worſe miſchief done: the patient, inſtead of being better, may be rendered much worſe. T. Emet. will afford a good example here alſo. Let us ſuppoſe we intend full vomiting; that from the ſymptoms of the caſe it is thought neceſſary. We adminiſter the emetic in the random way—the quantity is too ſmall. We call the next day to know how it operated---and, lo! inſtead of pukeing, it purged.---The patient is now much worſe---his pulſe is low and feeble---his ſtrength is much exhauſted. ---Obſerve what

is

is done!---Perhaps it may not be in our power to raiſe the pulſe, or recover that ſtrength which we loſt by this miſconduct. But the over-doſing is a thing that is more likely to happen, and will be what we have moſt to fear.

All theſe inconveniences may be avoided by the method already pointed out, *i. e.* by weighing, and, thoſe of more violent operation, with the greateſt nicety. If our ſcales, however, be bad, we had juſt as well be without them. The beſt are apt to contract ruſt, if not carefully prevented by keeping them dry and clean. The air itſelf contains enough of acid to corrode them, with moiſture enough likewiſe to give it action. The ſmalleſt deviation from an even ballance, will prevent them from ſerving nice purpoſes. The bad ſituations in which a regimental ſurgeon is often placed, with reſpect to his hoſpital and ſurgery room, will render this more liable to happen; but for this very reaſon he ſhould be more careful to clean them and keep them from dampneſs or dirt. Some may look on this as a trivial matter; but, whoever conſiders what has already been ſaid on the activity of medicines, and the great variety in the

the effects a ſmall increaſe or decreaſe of the quantity makes, will be of a different opinion.

What has been ſaid of T. Emet. is to be underſtood of opium. The ſtrained opium is what I have in view. It ſhould no more be adminiſtered at random, than the other. The bulk of a grain, or a grain and half, the moſt common doſe, is very ſmall, and may eaſily be too much augmented without the eye perceiving it. The L. Laud. we ſhall allow him to carry in a ſmall phial, the doſe of it being aſcertained by drops. Pulv. Doveri is another I have ſeen exhibited, as alſo Pulv. Jallap. in this unwarrantable random way to ſoldiers.

More might ſtill be mentioned; but we hope theſe will ſuffice, and point out, to ſuch as are about to enter the army, the impropriety of imitating ſuch careleſs practice: nor ever to liſten to the common, but deceitful tale, that a ſoldier's conſtitution far exceeding others in ſtrength, any thing in the way of medicine *may do for him*. Language of this ſort can only proceed from ignorance; and to believe it, and practice accordingly, muſt end in diſgrace.

CHAP.

CHAPTER VII.

OF DISSECTIONS.

When we conſider that many of the gentlemen in the regimental department of medicine entered the ſervice before they were properly initiated in the principles of their profeſſion, it will not appear ſtrange, if diſſections be but little proſecuted in many regiments, eſpecially among young practitioners of this deſcription. To inſpect dead bodies, ſo as to reap advantage from it, is not only attended with labour, but requires an adequate proportion of ſkill. The want of ſufficient anatomical knowledge may deter many, and, in ſome degree, account for the neglect of this branch.

No place, however, is better adapted for proſecuting diſſections than the army, from the frequent deaths that muſt take place among ſuch a number of men, I mean where more regiments than one (as is often the caſe in time of war) lie together. But though they cannot happen ſo often in ſingle regiments,*

* I have ſeen a year paſs with but one death out of upwards of 600 men; but I have ſeen ſeven happen in the ſame ſpace, in ſickly ſeaſons, and from other uniting cauſes.

yet many opportunities occur there alſo. Above all, the total diſpoſal of the bodies at the commanding officer's pleaſure, renders it extremely eaſy; for the ſurgeon, when a patient dies, need only aſk, and he will obtain leave to inſpect it.

" The more we know of our fabric," ſays the learned Dr. Hunter,* " the more reaſon " we have to believe, that if our ſenſes were " more acute, and our judgement more inlarg- " ed, we ſhould be able to trace many ſprings of " life, which are now hidden from us; by " the ſame ſagacity, we ſhould diſcover the " true cauſes, and nature of diſeaſes; and " thereby be enabled to reſtore the health of " many, who are now, from our more confined " knowledge, ſaid to labour under incurable " diſorders. By ſuch an intimate acquaint- " ance with the œconomy of our bodies, we " ſhould diſcover even the ſeeds of diſeaſes; " and deſtroy them before they had taken root " in the conſtitution.

" This, indeed, is a pitch of knowledge " which we muſt not expect to attain; but, " ſurely, we may go ſome way; and, there- " fore, let us endeavour to go as far as we can.

* Vid Introduct. Lect. p. 65.

" can. And if we conſider that health and " diſeaſe are the oppoſites of each other, there " can be no doubt, that the ſtudy of the natu- " ral ſtate of the body, which conſtitutes the " one, muſt be the direct road to the know- " ledge of the other.

" What has been ſaid of the uſefulneſs of " anatomy in phyſic, will only be called in " queſtion by the more illiterate empyrics " among phyſicians. They only diſcourage " others from the purſuit of knowledge which " they have not themſelves, and which, there- " fore they cannot know the value of; and " tell us, that a little of anatomy is enough " for a phyſician."

That diſſections will prove of great utility, I am perſuaded, need only be mentioned to gain it credit with moſt people of the medical profeſſion; and even now with a great part of the world in general. When the ſurgeon, therefore, has a patient whoſe diſeaſe he is doubtful where to rank in noſology, or how to treat in practice, from its uncommon and anomalous nature, according to his experience, every ſymptom ought to be attended to, and as carefully noted down: his obſervations ſhould be made once, twice, or oftener in the

day, if convenience will ſerve; and the effects of the medicines he preſcribes accurately remarked. If, notwithſtanding all the care he uſes, the patient dies, and doubts ſtill dwell on his mind reſpecting the nature and cauſe of the complaint, he ought, as a public regimental concern, if he underſtands anatomy, to requeſt leave to inſpect the body: if he omits it he is certainly culpable.

We ſhall ſuppoſe him engaged in it: and here he ſhould carefully take notice of every appearance deviating from the healthy ſtate. Theſe are to be compared with the ſymptoms already remarked, and from this he will be able to judge how far the ſymptoms are explained, or what remains ſtill to be accounted for. The uſe of this is obvious; ſhould ſome future period place a patient in his ſick liſt with ſimilar ſymptoms, he will now be better able to form a juſt notion of the diſeaſe. If he has every reaſon to ſuppoſe it is beyond the power of medicine, this even will prove a ſatisfaction not only to himſelf, but to the commanding officer, whoſe duty it is to enquire after the men's health, and the medical attendance given them. It will likewiſe relieve the ſurgeon from any future reflections.—For example:

ample: a patient comes into his hoſpital, whoſe chief ſymptoms are as follows:—an irregular intermitting pulſe; great palpitation of the heart on the ſlighteſt motion; diſpnœa; the apex of the heart changed from its natural ſituation, and turned conſiderably more towards the ſternum.—Another patient comes, where the beat of the heart itſelf is felt lower down towards the falſe ribs; he is alſo affected with palpitation, and great difficulty of breathing.—Both die.—On diſſection, he finds in the former caſe, the pericardium greatly enlarged, and containing a conſiderable quantity of ſerum; and which, by its long and conſtant preſſure on the left lobe of the lungs, prevented the blood from flowing into it, and the lobe itſelf from receiving its due nouriſhment, whereby it is almoſt totally conſumed, and the heart preſſed into its place:—in the latter, a preternatural dilatation of the heart itſelf; and, joined to this, an oſſification of its valves.* On this diſcovery, he ſhall be perfectly ſatisfied, his care and medical knowledge were altogether unequal to the taſk of reſtoring the healthful functions of theſe

 organs,

*. Theſe are two real caſes; but neither of them happened in the army.

organs, and ſaving his patient's life. Hence no future reflections can be thrown out, with the leaſt ſhadow of juſtice, againſt him in the medical treatment of theſe caſes; for, ocular demonſtration proved them to be incurable.

Another example:—he is again called to a patient. After proper enquiry, and mature deliberation, he is furniſhed with the following hiſtory, and is able to recount the ſymptoms here mentioned.—Firſt, the patient has been long valetudinary—dates the cauſe to a ſevere fever, almoſt ſo far back as twenty years—which changed the conſtitution from robuſt to weak—the countenance from a florid to a pale and cahectic appearance:—Became thin—delicate—and ſubject to hyſteria (the patient was a female) and this weakneſs and delicacy perhaps heightened by her becoming the mother of ſeveral children.—Complaints continued ſlowly advancing, till the latter end of 1782.—Medical advice was then had recourſe to.—The ſymptoms that *then* preſented themſelves were theſe:—an anxiety, and an uneaſy ſenſation on inſpiration.—Senſe of a ſtricture about the breaſt; it gave the idea of a contraction of the parts.—Was attended with much pain; nay, ſo violent, on taking

the

the exercise even of gentle walking, as to oblige her to stop short, to recover her departing breath, and keep herself from fainting.--On these occasions, pulse low, yet never intermitted.---Great depression of spirits. Every night now, on going to bed, these painful spasms recurred with violence---would continue from one to two hours, or longer---then yielded for some time---but a night seldom passed without one or two of these painful paroxysms.---They were at the same time accompanied with a sense of weariness, and pains in the limbs.---Observe, however,---these painful paroxysms of difficult respiration gave her sometimes a respite for a month at a time.---In these intervals hysteric affections often appeared.---It must not be omitted, that, during the fits, there was great palpitation of the heart.---The intervals of ease which we have said were sometimes a month, became gradually shorter; and, as might be expected, she grew still more debilitated.--Was now very easily thrown into perspiration.--The admission of the gentlest stream of cold air gave great uneasiness---so much, that on going into the open air, she was obliged to guard against it

with the ſtricteſt care, by warm flannel put round the breaſt, and up to the neck.---Appetite now failed.---Complaints ſtill encreaſed---recurred with aggravated---with reiterated ſeverity---till at length, in the beginning of 1786, ſhe was releaſed by death from her miſery.---On inſpecting the contents of the thorax, from whence the chief of theſe painful ſymptoms ſeemed to originate, not only in the pericardium, but in both cavities of the breaſt, a conſiderable effuſion of ſerum was found.---Here was an explanation of part of the ſymptoms.---The inſpection was further proſecuted.---The heart itſelf was carefully examined---and, lo! the valves placed at the entrance of the right ventricle were found ſtrongly offified, and ſo united, that the paſſage for the blood to flow into the veſſel was nearly ſhut up; the aperture left was little more than could admit a ſilver probe of the common ſize!---Here was enough to account for death; and to prove, likewiſe, the diſeaſe incurable.---Obſerve---in this caſe, no intermiſſion of pulſe was diſcernable, till towards the laſt period of the complaint; and it was no great while before death, when the ſymptom of

of painful ſpaſm was attended with conſiderable intervals. Let the phyſiologiſt, however, explain it.—The caſe is a proof of the utility of diſſections, in as far as it is clearly proved, that the event was irremedeable—it ſatisfied relations and friends—it prevented reflections on the attending practitioners.*

Such caſes of diſſections ſhould be carefully tranſcribed into a book kept for that purpoſe; and, joined to them, any remarks occurring on the occaſion. Theſe, no doubt, would be found extremely uſeful afterwards. Nor am I ſure, whether they might not prove as ſerviceable to the regiment in time to come, to have a copy of them taken by the regimental clerk, for the inſtruction of ſucceeding ſurgeons, as any other regiſter in their poſſeſſion. Could they ſave one life only in the ſpace of twenty years, they would compenſate ſufficiently for the labour of regiſtering; while the inſtruction reſulting from the caſe to the ſurgeon himſelf would be a farther compenſation, and a ſufficient motive for his purſuing diſſections in future.

Another

* This is alſo a true caſe, in the author's practice, but not in the army.

Another leſſon, equally inſtructive, will reſult from diſſections, *i. e.* when ſome caſe preſents, itſelf the nature of which he is acquainted with, but cannot ſucceed in removing the diſeaſe. Suppoſe an ileus: this, he knows, conſiſts in a ſtricture of the inteſtines, which prevents a depoſition of the fæces. He tries every method to remove it, which reaſon or experience ſuggeſts: oily and turpentine clyſters; tobacco ſmoke; veneſection; bliſters laid on the abdomen; the daſhing of cold water over the lower extremities,* with every other means in his power: all are in vain. He reads, as he turns over authors on the ſubject, in order to collect their different practices in ſimilar caſes, of a propoſal to force the ſtricture by weight. He has recourſe to it: ſeveral ounces of crude mercury are immediately ſwallowed by the patient, and repeated at a ſhort interval. It will not ſucceed: the ſtricture remains fixed. A mortification quickly enſues, and death is the conſequence. The body is opened to diſcover the ſtricture; and, lo! the boaſted mercury, inſtead of deſcending in an uniform maſs to the ſeat of the diſeaſe,

* Vid. caſe in the Med, Eſſ. cured by this means.

diſeaſe, is found divided into millions of globules, of great minuteneſs, by the mucus of the ſtomach and inteſtines over which it paſſed, there remaining, and adhering to their coats. This proves inſtructive to him; for though he could not remove the diſeaſe, yet, when a ſimilar caſe preſents, itſelf, he can ſay, with great confidence, that this boaſted and theoretical remedy is as uſeleſs as it is imaginary, while the diſſection ſtands on record to corroborate his aſſertion. *

But diſſections are uſeful in other reſpects. In the manual operations of ſurgery it is from them we learn, what we may do with ſafety, and how we may avoid difficulties, and eſcape dangers.—"It is diſſections alone that can "teach us where we may cut the living body "with

* Vid. De Haen Rat. Med. where this is propoſed and recommended. This is likewiſe a real caſe. When I was a ſtudent at Edinburgh, this practice was put to the teſt in the Clinical ward of the Royal Infirmary by Profeſſor Home. The Patient died; and the diſſection, at which I aſſiſted, proved what is now related: The body was opened by my learned fellow ſtudent, the late Dr. Cleghorn, jun. (profeſſor of anatomy afterwards in the univerſity of Dublin) then clinical clerk; whoſe abilities will long remain in the memory of his acquaintances, and his death be long regretted by all that knew him, as well as all lovers of medical ſcience.

" with freedom and diſpatch; and where
" we may venture with great circumſpection
" and delicacy; and where we muſt not, on
" any account, attempt it. This informs the
" *head*, gives dexterity to the *hand*, and fami-
" liarizes the *heart* with a ſort of neceſſary
" inhumanity, the uſe of cutting inſtruments
" upon our fellow-creatures." *

There may be many caſes given as examples of the utility of diſſections: among others, ſudden and unexpected death; or where the patient complained, but his complaints ſo vague, that the phyſician could diſcover few or no ſymptoms by which he could guide his practice. I ſaw a caſe of this kind, in 1781, under the care of one of the ableſt phyſicians of the age: the patient was a boy about twelve years old. Leave was not obtained to inſpect the body; but, there is reaſon to believe, diſſection would have thrown ſome light on the ſubject. Perhaps ſome diſeaſe might have been diſcovered in the brain. The boy complained of ſome head-ach; yet had no feveriſh ſymptoms; nor did any thing appear to indicate hydrocephalus internus (and yet I have ſome reaſon to think water was lodged in the head) except that he

* Hunter's Introduct, Lect. p. 68.

he ſaid his ſight and hearing were both ſomewhat occaſionally (not conſtantly) impaired.

But I find, from a caſe I had under my care at Ipſwich in Suffolk, in March 1784, that the ventricles of the brain may be loaded with water, yet few of thoſe ſymptoms appear which authors have laid down as almoſt invariable in ſuch caſes: nor yet the diſeaſe run through thoſe regular ſtages they have related as its common courſe. The patient I mean here was a young man, twenty-three years of age. When he came to aſk my advice, his chief complaint was a violent head-ach, returning irregularly; would ſometimes continue for hours; at other times, ceaſe in a few minutes; he had a tingling noiſe in his ears; and I found he had convulſive fits ſometimes: theſe, likewiſe, his maſter ſaid, attacked him irregularly—ſometimes two or three times a day; ſometimes not for ſo many weeks. He had been affected in this manner ſeveral years. He was of a very florid complexion; his ſkin thin and ſmooth; his hair fair; and he was alſo of a ſoft lax temperament, evidently ſanguineous. I was alſo informed, his father had died of a complaint ſomewhat ſimilar, as it was deſcribed

me. I muſt not omit, that on taking nouriſhment of any kind, he informed me, his head-ach increaſed, and if the food was hot, ſtill more; became violent; and he was now moſt apt to be ſeized with a fit. I obſerved, alſo, that he leaned his head to one ſide, and ſeemed to have a rigidity of the neck. His maſter confirmed this to me afterwards, and added, that he would hold it a few minutes on one ſide, then turn it on the other, as if to reſt it. From the account I had received of the father's death, I looked on the complaint as hereditary, and owing to a mal-conformation of the parts, perhaps the bones; but, as his countenance appeared ſo florid, and his whole habit full of blood, I directed the ſurgeon to open the temporal artery, and take away ten ounces of blood; then to ſhave the head, and apply a bliſter. As he was of a coſtive habit, and, he ſaid, always worſe when he went two or three days without a ſtool, which was often the caſe, I ordered him ſome laxative pills. It is to be obſerved, he had no fever, nor ever had been affected with one ſince the head-ach began. The ſurgeon endeavoured to open the artery as directed, but could not ſucceed; he then opened a vein in

the arm, with conſiderable difficulty, on account of the ſmallneſs of the veſſels, and depth they were ſunk; he took, however, the quantity mentioned, and got his head ſhaved; but, an uncle, to whoſe houſe he now repaired (for he was obliged to leave his ſervice) would not permit the bliſter to be applied: a week, or more, intervened, and then it was laid on his back. It is remarkable of the blood, that it concreted ſpeedily into a firm, ſolid maſs, with the ſeparation of little or no ſerum, and with a thick, tough pellicle of coagulate lymph on the ſurface. This ſeemed to indicate more evacuations. His pills were given, and they had the effect. He continued better for ſome time; but, as the uncle refuſed to comply with my advice, of applying the bliſter, I did not afterwards preſcribe for him. Mr. Stebbin, of Ipſwich, the ſurgeon that attended, viſited him, however, once or twice afterwards. He grew better; had no fits, and but little head-ach for a fortnight; on which, concluding himſelf well, he returned to Ipſwich to reſume his ſervitude. He called on me the ſame day, and thanked me for my care. There was no reaſon, from the trifle that had been done, to ſuppoſe him cured. On looking

in his face, I perceived his eyes ſtare, and the pupils dilated rather more than in health; yet he did not complain of any defect in his viſion. He had the ſame ſtiff appearance in his neck. He left me, and, in an hour or two afterwards had a fit, which made him again return to the country that evening. In three days after, he was dead.

The morning he died, he roſe out of bed without help, which he had not done for a day or two, ſat down in an armed chair, talked a little, as uſual, with one of the family, and ſaid he was better; then ſhut his eyes, as if falling into ſleep, leaning his head againſt the back of the chair. He continued ſo for half an hour, and they concluded he was aſleep, and would not diſturb him; but, on going near, they found him dead.---Leave was given to open the head. I begged the ſurgeon to inſpect it, but, being at that time confined to bed with a complaint in my leg, I could not attend him. On returning, he gave me the following relation:---that in place of veſſels being burſt, and an extravaſation of blood on the brain, as we both ſuſpected, he found the ſtate of things very different. The cranium was extremely thin, more ſo than he had

ſeen

ſeen it in any ſubject; and ſoft in all its parts; ſo that the ſaw ran through it with the greateſt eaſe; and it ſeparated from the brain without any difficulty whatever. While he was cutting the occipital bone, pretty low down towards the neck, the ſaw going through, and penetrating the dura mater, above the cerebellum, but nothing more, a ſtream of water iſſued out. Beſides what was thus loſt, he ſaved about ſix ounces. The young's man's maſter, who went with the ſurgeon, and another man, being preſent, both declared there was in the whole full ten ounces. The whole ſubſtance of the brain was ſoft and flabby, rather whiter than uſual, and no marks whatever, or red points, to be ſeen in the inſide of the ſkull, which commonly happens in diſſections, from the rupture of the veſſels communicating from the external with the internal parts of the head. He examined the reſt of the brain, but found no ſchirroſity either in the pituitory gland or other parts. From the ſight being ſcarcely at all injured, it would ſeem that the water had been more in the third and fourth, than in the lateral ventricles; for, had theſe been full, the thalamus nervorum opticorum muſt have

been compreſſed, and viſion impeded. Thoſe who contend, that no communication is to be found between the third and fourth ventricle, will ſay, the water was all contained in the fourth; and would uſe this as a caſe in point to prove it. But it would be too raſh to conclude this here, from the ſpongy ſtate of the brain, which did not allow of an accurate examination of the other ventricles; and from the ſpecific gravity of the fluid falling down to this, as the moſt depending part, and puſhing its way there with more eaſe from the diſeaſed ſtate of the cerebellum.

It has been objected to me, in ſpeaking in favour of regimental diſſections, that it would deter men from entering into the ſervice; for as it would be rumoured abroad, that men were always opened when they died in the army, as the vulgar in general expreſs an abhorrence of the practice, it muſt follow, that none would chuſe to enliſt into a regiment where this was cuſtomary. This, however, is an ill-grounded objection; nor do I think it can carry any weight with it. Is it not meritorious to endeavour to ſearch out the cauſes of diſeaſes? and muſt not this hold as well in the army as out of it? No

regiment, I am confident, will bear a worſe report on this account. Many examples might be quoted, where they have been proſecuted by the ſurgeon on every proper opportunity, and no danger of this kind followed. But, I can pronounce the objection groundleſs from my own experience. I have been preſent at a diſſection made in a regiment which, ſo far from being done in a clandeſtine manner, through any apprehenſion of this nature, it was done openly, and in the preſence of ſeveral ſoldiers, who were called as attendants and aſſiſtants; and with the knowledge of the whole hoſpital beſides; and, before it was finiſhed, might be known to upwards of fourteen hundred ſoldiers then in the town. Nay, I have been informed, that, in ſome regiments, to the honour of the commanding officer and corps, when a private dies, the ſurgeon receives orders to inſpect the body. Incapacity or idleneſs may invent apologies for neglecting anatomical reſearches; but, we would beg leave to ſuggeſt ſome heſitation in fixing ſuch a ſtigma, as I would call it, on the army in general. The works of ſeveral eminent men who have practiſed in the army, and improved their profeſſion there, remain

laſting proofs of the futility of ſuch objections.

Beſides, this is not an age for ſuch ignorance and ſuperſtition. We find few now, of any rank, that are not fully convinced of the utility of opening bodies for the benefit of ſurvivors; particularly when the diſeaſe has been ſuch as could not be aſcertained; or when it is to prove by demonſtration, for the ſatisfaction of friends, diſeaſes that lie beyond the power of aid. Were we to muliply authorities to ſupport us in our opinion of the great importance of diſſections, many might be quoted. "The opening of morbid bodies "after death," ſays Sir George Baker, "if "it not always aſſiſt a phyſician," (the regimental ſurgeon ſhould have the knowledge of one) "in his future practice, has its ſin- "gular uſe, in as much as it frequently "exhibits the genuine effects of a fatal "diſeaſe *."

I have attended patients (not ſoldiers) particularly young ſubjects, under hydrocephalus internus; and, when they died, the parents have *inſiſted* on my opening them; and, in one caſe, the father ſtood by me all the time.

I will

* Vid. Med. Tranſ. Vol. II. p. 468.

I will venture to ſay, that whenever I wiſh to open a body, either in the army or out of it, I ſhall be able to accompliſh my deſigns; at leaſt, this far I may affirm, that I never yet met inſuperable difficulties here; neither have we any reaſon to ſuppoſe, that others will be leſs ſucceſsful, if they make the attempt.

"The hiſtory of anatomy," ſays Dr. Hunter, "ſhould ſtimulate *us all* to cultivate it "with diligence, when we ſee that anatomiſts, "in all ages, have made uſeful diſcoveries; "and, in conſequence thereof, have enjoyed "the advantages of reputation in their pro- "feſſion; and when we ſee, that the ſubject "is ſtill ſo far from being exhauſted, that it "is to this day, and muſt be to the end of "time, new, entertaining, uſeful, and inex- "hauſtible *."

When friends and relations obſerve, that the requeſt is not made from wanton and idle curioſity, but for the ſake of information; when, beſides, they obſerve all delicacy uſed, as far as the nature of ſuch operations can admit, the reluctance they at firſt might ſhew to the propoſal, now ceaſes. Uſe will even

* Vid. Introd. Lect. p. 62.

reconcile people more to it; and, from its frequency, it will become familiar.

"Were I to gueſs," ſays the author above quoted, "at the moſt probable future im-
"provements in phyſic, I ſhould ſay, that
"they would ariſe from a more general and
"more accurate examination of diſeaſes after
"death. And were I to place a man of pro-
"per talents, in the moſt direct road for be-
"coming *truly great* in his profeſſion, I would
"chuſe a good practical anatomiſt, and put
"him into a large hoſpital to attend the *ſick*,
"and *diſſect* the *dead*."

It will be farther objected, and we may, perhaps, be aſked, how can young men proſecute them with ſucceſs, who, according to our own ſuppoſition, never had proper opportunities of inſtruction? True; they cannot at firſt; but, if inſtruction be their wiſh, by the help of books on the ſubject, and the inſpection of bodies, they may, in a great meaſure, overcome theſe obſtacles. Diligence and perſeverance have often ſupplied the want of better opportunities of information. I knew a gentleman (now dead) who, by ſuch application in opening bodies, firſt inſpecting dogs, ſheep, &c. arrived to a tolerable proficiency

proficiency in anatomical knowledge, before he ever entered the walls of an univerſity, or ever ſaw a diſſection but what he had made himſelf; and, at this time, I am confident, he knew more of the human body, could deſcribe more of its parts, and their ſituation, than many who had ſpent ſeveral years there profeſſedly at the ſtudy.

"If we look among the phyſicians of the "beſt character," ſays the learned author we have ſo often quoted on this part of our ſubject, "and obſerve thoſe who have the *art* "itſelf, rather than the *craft* of the profeſſion "at heart, we ſhall find them conſtantly "taking pains to procure leave to examine the "bodies of their patients after death. Deſir-"ous that it may be done by experienced "anatomiſts (a circumſtance often of the "higheſt importance) and unhappy when "they cannot procure this opportunity of im-"proving themſelves and their art *."

On the whole, no doubt can remain but the regimental ſurgeon, who wiſhes to improve himſelf in this branch, will find opportunities enough in the army: and ſhould it not be cuſtomary in the regiment before, he

* Hunter's Introd. Lect.

will not, I think, find it impracticable, by proper repreſentation, to prevail on his commanding officer to allow it; and what he wiſhes to have done, it is well known, muſt not in the regiment be refuſed. Some murmurs may at firſt be heard, but it will depend on the ſurgeon's own conduct and behaviour to quell them. They will ceaſe by degrees, as the novelty of the cuſtom abates, and the ſooner, if he be careful to point out the uſe and real intention of his reſearches.

I cannot do better than finiſh this ſubject with the ſentiments of the celebrated anatomiſt * above alluded to, in anſwer to another opinion that has been given againſt the proſecution of diſſections: the opinion, that it is not worth the trouble; and even unneceſſary, to drudge any length in it.—"When we "hear," ſays he, "of any men of the pro"feſſion talking of all the knowledge of ana"tomy that is neceſſary for a phyſician, and "of as much as a ſurgeon needs to know, we "cannot but lament the ſingular hard fortune "of his patients; firſt, in being ſick or diſ"eaſed, and then in falling under the care of "ſo ignorant a counſellor.—Who is the man

"of

* Hunter's Introd. Lect. p. 68.

" of practice and integrity that can lay his
" hand upon his heart, and ſay, that he has
" not, in ſome caſe or other, had occaſion for
" all his anatomical knowledge; and who has
" not wiſhed, at times, that he had been
" poſſeſſed of more?---Who, then, are the
" men in the profeſſion that would perſuade
" ſtudents, that a little of anatomy is enough
" for a phyſician, and a little more too much
" for a ſurgeon? God help them! they have
" it not themſelves, and are afraid that others
" ſhould get it. The more clear and perfect
" our knowledge of every part of the body is,
" both in its ſound and morbid ſtate, the bet-
" ter we ſhall underſtand the nature, and
" ſtrength, and tendency of its diſeaſes. Thence
" we ſhall more readily and certainly learn to
" diſcover a diſeaſe in its beginning; to ob-
" ſtruct its progreſs; to put it under difficul-
" ties; to prevent its gaining ſtrength by the
" acquiſition of auxiliaries; to cut off its ſup-
plies; and, finally, to drive it out."

CHAP.

CHAPTER VIII.

THE NECESSITY OF GOOD INSTRUMENTS—OF FIXABLE AIR—AND OF ELECTRICITY IN REGIMENTAL PRACTICE.

INSTRUMENTS proper for operations ſhould always be in readineſs. No regimental ſurgeon ought to be without them; for although operations ſeldom occur in a regiment, except on actual ſervice, and after a battle, yet caſualties may, and do ſometimes happen. On ſuch occaſions, therefore, to be unprovided is unpardonable.

Compleat pocket caſes, and ſets of amputating inſtruments of the moſt approved form, with needles, thread, and ſponge, ſhould be procured. As a ſurgeon in the operative part of his profeſſion improves greatly by practice, ſince dexterity of hand is as neceſſary as judgement, he ought frequently to operate. This will be a farther reaſon for his proſecuting diſſections on every convenient opportunity.

We have already taken notice, that ſuch opportunities will often preſent themſelves in his line of life, where, undiſturbed, he may improve himſelf

himſelf in operations, and in a knowledge of the ſtructure of the human body. He that labours moſt in this branch, only knows how much ſtill remains to be attained. What then ſhall we ſay of the ſurgeon, who never labours at all? Perhaps the moſt experienced in operative ſurgery never performs an operation, that, when it is over, he does not diſcover ſomething omitted; and who has not reaſon to ſay to himſelf, "If this was to do again, I "would perform it differently, by which, as "I now perceive, I ſhould avoid not only in-"conveniences to the patient, but to myſelf." I have heard experienced ſurgeons make ſimilar declarations.

Cool, ſteady, deliberate intrepidity, where neither the heart ſhall fail, nor the hand ſhake, is of all other things the moſt requiſite in this art. But this can only be acquired by frequent repetitions of operating. It is this that gives confidence from our knowledge, ſteadineſs from uſe, and prevents raſhneſs, which is the effect of ignorance. Although the operation on the dead and living ſubject be different, yet it is on the dead we can beſt initiate ourſelves in the practice. Here we firſt acquire a dexterity and readineſs of hand;

our

our knife becomes eaſy and familiar to us, and aukwardneſs is overcome by frequent repetition. When we come to execute the ſame on the living ſubject, it is true there are caſualties and difficulties we muſt expect, and be prepared for; ſuch as large hemorrhages, and other things, which in the dead ſubject do not diſturb us. If we are altogether novices in our buſineſs, theſe may conſiderably diſconcert us; and perhaps create ſuch an alarm as to prevent our finiſhing the operation, from the trepidation we are thrown into. Nor is this a new caſe: ſurgeons have been known to begin operations, and for want of ſufficient courage, which a greater frequency of operating would have given, have yielded the knife to another; yet who were not perhaps leſs informed in what was requiſite to be done, than the perſon who finiſhed them. Even after we are well accuſtomed to the uſe of the knife, accidents may happen which ſhall confuſe us. If, for example, from too great an eagerneſs to extract the ſtone in lithotomy, the young operator ſhould chance to take hold of it ſo hard as to break it in pieces, it might not only throw him into confuſion, but really occaſion miſchief to the patient, by the admiſſion

miſſion of air into the wound during the time ſpent in ſcooping out the different fragments, and from the encreaſed irritation given by the frequent introduction of an inſtrument for this purpoſe. I knew a caſe not many years ſince, where a ſurgeon from this cauſe was very greatly diſconcerted. He was as well acquainted with the different ſteps of the operation, as any of his brethren preſent, yet, in the midſt of his performance, his heart failed, his hand ſhook, and he was conſequently compelled to relinquiſh the knife to another, who, from being more in the habit of operating, finiſhed it without heſitation, or the leaſt trepidation.

While I mention the circumſtance of too forcibly graſping the forceps, I beg leave to inform the reader of an improvement, as it appears to me, of no ſmall moment in this inſtrument, lately ſuggeſted by Mr. Stebbing, a ſurgeon, in Ipſwich. By this alteration, accidents of the above nature, muſt, in a great meaſure, if not altogether, be prevented. Through the means of this improvement, the operator can not only *inſtantaneouſly* faſten the forceps, ſo as neither to ſlip, nor ſlacken their hold, while he reſts his arms; but he may, *ad libitum*,

tum, uſe leſs or more preſſure on the calculus, and ſuffer himſelf to let the inſtrument go, on turning a ſmall ſcrew.

He may now introduce his finger to examine the ſituation of the calculus, and turn it, ſhould it be graſped by the long diameter, and thus render it not only more eaſy of extraction, but avoid much pain, and ſubſequent inflammation.

The improvement chiefly conſiſts in a ſmall piece of ſoft metal ſliding through the extremity of the handles, to one of which it is ſoldered; it is made to ſlide eaſily, as the forceps are ſhut or opened; and it is rendered fixed in a moment, at any point the operator pleaſes, keeping the blades leſs or more open, by only turning gently the ſmall ſcrew, the point of which lays hold of the ſlide, and it becomes immoveable.

For want of a contrivance of this ſort, I have more than once ſeen great inconveniences. The lithotomiſt has been obliged to tie the handles of the inſtrument together to preſerve his hold, till he introduced his finger to examine, or till he reſted himſelf. The above makes it both ſafe and eaſy either to do this, or to dilate, if neceſſary, the wound, or otherwiſe

otherwiſe examine the progreſs of the operation, and the nature of the obſtacles to the ſafe extraction of the calculus, ſhould there be any in the way.—But to return.—If in an amputation the veſſels ſhould be found difficult to be ſecured from a diſeaſe in their coats, it might in like manner diſturb a ſurgeon unaccuſtomed to operate, and perhaps confuſe him ſo much, as to prevent the proper degree of reflection now neceſſary. The coats of arteries are alſo ſometimes ſo indurated, and even brittle through diſeaſe, that when the limb is taken off, much difficulty attends making the ligatures on them properly ſecure. I have been preſent at caſes where one of the moſt experienced ſurgeons in London found no ſmall obſtacles in this part of the operation. After taking off the limb, the arteries were ſo brittle, that no ſooner was the ligature drawn tight, but the veſſel broke through before its ſides could be brought ſo cloſe together as to prevent the hemorrhage; and this took place repeatedly, even to the third or fourth time. We may eaſily conceive into what terror a young man, little accuſtomed to operations, would have been thrown in theſe caſes. Arteries may be putrid,

trid, and the ligature from thence give way, and cauſe much confuſion. We have a caſe of this ſort in the ſecond volume of the Med. Comment. wherein this happened after an operation on the femoral artery, performed by Mr. Leſlie, of Cork. About an hour after the artery was taken up, the ligature cut through, and produced ſome inconveniency.

A ſurgeon knows the value of good inſtruments, and will therefore take care to be provided with the beſt, if he wiſhes for ſucceſs in operating. Both himſelf and the patient will reap the advantage of them. This is not the caſe, however, with all regimental practitioners. It has been found neceſſary to ſpur ſeveral on to their duty in this reſpect. In caſes where negligence is obſerved in keeping good inſtruments, it becomes the commanding officer's buſineſs to oblige them to be well provided. And I am well informed of a commanding officer, who, conſcious of the ſurgeon's neglect here, and which is too frequent in the army, has himſelf ſent an order to an inſtrument maker, and ſtopped the price out of his ſubſiſtence.

Inſtances

Inſtances have occurred, where a ſurgeon, even in England, (though almoſt every town where he quarters would afford them) has not been provided with any beyond a lancet, or two; and theſe alſo of a bad quality *. With regard to lancets, nothing is ſo dangerous as uſing bad ones. The force they require in piercing the integuments, puſhes them generally too far into the vein, by which the phlebotomiſt is in danger of going through it on the other ſide; of pricking an artery if it be in the way; or, what is not leſs dangerous, of wounding a nerve.

Dr. Monro mentions to his pupils annually ſome caſes of this kind, one of which, I think, proved fatal; and the others were attended with no ſmall danger. One, if I miſtake not, was a lady, who only ſlightly pricked her finger with a needle. A ſecond was a gen-

P tleman,

* This is properly ridiculed in a late publication, where the foibles of the officers of the Britiſh army, as well as the ſurgeons, are expoſed. Among other things, the ſurgeon is here ironically admoniſhed to *keep two lancets*; a *ſharp* one for officers, and a *blunt* one for the privates: "for," adds the author, "this will be making a proper diſtinction between "them."—There is juſt foundation for the ſarcaſm. Vid. Advice *to Britiſh Officers*, publiſhed in 1783.

tleman, who, ſitting at table where a drinking glaſs happened to be broke, and by ſweeping off the pieces with his hand, a ſmall bit of the broken glaſs pierced it. Though this little ſcratch ſoon healed, it was ſeveral months before he was free from the danger it created. A gentleman in Middleſex * gives us three inſtances of it from bleeding; one of which had very nearly terminated in a locked jaw, and in death. Beſides, the cavity or internal ſurface of the vein itſelf might enflame, and produce very alarming ſymptoms. If theſe ſometimes happen in the hands of ſkilful ſurgeons, with inſtruments of the beſt ſort, are we not to ſuppoſe they will happen more frequently from bleeding with ſuch blunt lancets as we hinted at above?

I might give myſelf as an example of the dangerous effects of partial wounds in nerves. —In the autumn of 1782, while I was employed in examining the ſtructure and the joints of a horſe's leg, partly for my amuſement, and partly to demonſtrate the conſtruction to ſome officers fond of horſes, and who thought improvements might be made in ſhoeing

* Mr. Sherwen, ſurgeon, Enfield. Vid. Med. Comment. vol. 1. p. 210.

ſhoeing them; while I was engaged with a ſaw in taking off the hoof, to bring into view the different parts of the coffin joint, and point out the thinneſs of the horny part, too much of which ſmiths injudiciouſly ſcoop away, I ran the teeth of it obliquely over the ſecond joint of my thumb; but ſo ſlight was the injury, that the cuticle was only raiſed, and torn a little; yet the pain and inflammation which ſucceeded in the part that evening, entirely deprived me of reſt. This continued unremittedly for upwards of a week, during which I ſlept little. Every thing that ſeemed to bid fair to allay the inflammation and irritation, was applied. It ſpread up to my wriſt; the part became numbed; I loſt both the uſe of motion and feeling in it; while the joint of the phalanx above that which was wounded became ſo painful on the ſlighteſt motion, that it created me great uneaſineſs. It continued ill for upwards of four months, and it was much longer before I could graſp any ſubſtance with that thumb, ſo ſmall as a pin. All this could not proceed from a wound ſo ſlight as ſcarcely to bring a drop of blood, had not ſome cutaneous nerve been partially wounded.

But to return. If the lancet be good, we have much leſs danger to apprehend. Almoſt the gentleſt force makes it penetrate the ſkin, while it ſlips with eaſe into the vein, and with little or no pain to the patient, who always complains ſeverely from a bad lancet. "All "the other operations in ſurgery," ſays the ingenious Mr. Bell, ſpeaking on the ſubject of V. Section, "I have frequently ſeen well "performed; but I can with freedom ſay, "that I have ſeldom ſeen blood letting with "the lancet done very correctly. When "properly performed, it is really a neat opera-"tion; but when not done with much exact-"neſs, it is the reverſe."* The ſame author goes on to ſhow, that bleeding in other parts of the body may be attended with leſs danger, particularly in wounding an artery, than the arm, at the common place near the cubit, where blood is generally let. He mentions the feet, or the arm lower down than the cubit; or the jugular vein. A full ſtream of blood, he takes notice, may be obtained from the feet near the ancles, as well as from the arm. His advice is worth attending to. It certainly

* Bell's Surg. p. 64. vol. 1.

certainly would render aneuriſms leſs frequent.

I hope, after what I have ſaid reſpecting the conſtitutions of ſoldiers, no argument need be offered to obviate the common apology, that "any thing may do for a ſoldier." The ſuppoſition that they can bear ſurgical operations better than others, from a hardneſs and calloſity of feeling, is a falſe one; and to take it for granted without proof, and to act accordingly, is improper. I have on many occaſions ſeen an apparently ſtrong and robuſt man tremble at the ſight of a lancet, and faint away in the courſe of the operation, who, I dare ſay, would have undauntedly charged the enemy with fixed bayonet, or mounted a breach without fear. There is ſomething abhorrent in our nature at the deliberately wounding our fleſh. Some feel, we allow, more acutely and ſenſibly than others; but if I have found one who could hold the cup to receive the blood without being moved, or ſtarting in the leaſt at the prick of the lancet, I have found ſix of as delicate a mobility. And why ſhould it not be ſo? What could give riſe to the contrary ſuppoſition ſo injurious, as it occaſionally proves to the ſoldier in his medical

treatment? Have not many of them been as tenderly bred up, and previouſly accuſtomed to as decent treatment as the rank of mechanics and labourers allow? In their own houſes, we all know mechanics meet with no ſuch hard treatment in their ſickneſs from the faculty. Can a few months, perhaps a few days, ſo change their natures? We know the contrary. This can never take place, but by length of time and habit. Many of the ſoldiery ſuffer moſt in their health when they are leaſt able to bear it, *i. e.* ſoon after their entrance into the ſervice, before they become inured to the muſquet, or the duties it requires. We do not always find the loweſt orders of mankind in the ranks. If we enquire, we ſhall often diſcover youths who have been tenderly bred up; and men long accuſtomed to better days. The ſon, perhaps, of ſome worthy clergyman, that the giddineſs of youth hurried thoughtleſs into this way of life. The once flouriſhing farmer; or the reputable tradeſman. I knew inſtances of all theſe; of many whom misfortunes drove into the ſervice. Some indeed entered into it through folly. But we have ſpoken of this already.

While I am on the ſubject of V. Section, let me mention a caution, which I think neceſſary

ceſſary to lay before the young regimental ſurgeon. It is this: never to allow a ſoldier on being bled, to uſe his firelock till at leaſt after two days, that the vein may have time to cloſe, and the cicatrix begin to form. As a ſoldier is never to be bled merely from his own deſire, but when the ſurgeon is convinced there is reaſon for it, this delay can be of no detriment to the diſcipline; for it is better his name ſhould remain two days in the ſick liſt than twenty.

In the autumn of 1781, I bled two privates for ſome trifling complaint, which did not require them to be continued in the hoſpital liſt. They were diſmiſſed accordingly, and the ſerjeant, as uſual, took them out to duty. The conſequence was, that about a week after they both returned to the hoſpital with their arms not only enflamed, as if a nerve had been pricked, but with a pretty large tumor on each, ſomewhat reſembling an aneuriſm. It was hard, and did not, like the aneuriſm, yield or diſappear on preſſure. I mean the encyſted aneuriſm; the diffuſed aneuriſm does not yield, or diſappear on preſſure. I was, however, ſomewhat alarmed, leſt one or other of theſe accidents had taken place, of the bad conſequences of which I was

well aware; but on examining the vein that had been opened, which in both was the median baſilic, near which no artery lies in the moſt common ſtructure of the arms, and diſtribution of the blood veſſels, I was ſatisfied that my fears were groundleſs; nor did I think a nerve had been pricked, becauſe the inflammation had not ſpread far up the arm, nor was any numbneſs in it, or other ſymptoms moſt generally accompanying that accident.

I dilated the integuments above the orifice in the vein; applied the common digeſtive, with bread and milk poultice, over all; and as the inflamation ſtretched round the orifice a little way, I ordered warm ſtupes, in which wormwood and camomile flowers were boiled, to be applied twice a day, as hot as convenient, an hour at a time. Theſe were continued more than a week. By this method they were both cured; but not till after the formation and diſcharge of a conſiderable quantity of pus. It was, however, ſix weeks before they could do their duty. My colleague happened that morning to bleed another ſoldier, who in like manner went to *drill*; and the ſame accident happened to him. The regiment was young,

and

and the drill duty ſevere at this ſeaſon, to prepare for a review.

Had any error happened either on his or my part, I ſhould have conſidered it incumbent on me to mention it here, as a caution to others. The accident, however, proceeded from the violent exertions of the arm in exerciſing with the muſket. All this would have been avoided by giving charge to the ſerjeant not to take them to drill, or other duty that required the uſe of arms, till the orifice had cloſed a little. Experience taught me my miſtake, in allowing them to go from the hoſpital that day; and it is mentioned now, that others may not fall into the ſame. Mr. Bell's directions, not to bleed in the arm if other parts, as already mentioned, can be had recourſe to, will apply no where with more propriety than in the army. Had a vein been opened in the foot, or ſomewhere about the neck, the violence of exerciſe, which falls moſt on a ſoldier's arms, would not have affected them near ſo much, and theſe troubleſome tumors would have been avoided. And it may be added here, that the leſs danger will follow if the lancets be ſharp. The author above quoted aſſures us, he never uſes the ſame lancet twice, without ſending it to his cutler.—

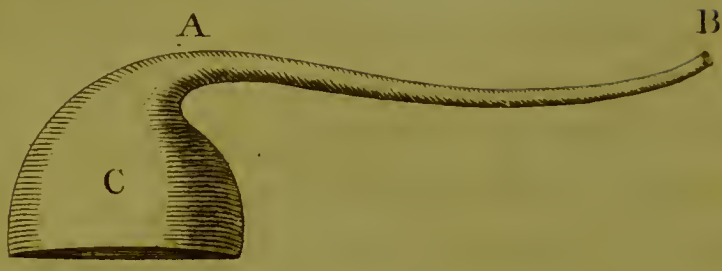
cutler.—The form of the lancet, the poſition of the arm, (if we ſtill prefer the arm) after the vein is opened, the manner of applying the ligature, are all material conſiderations, though too little attended to.*

Among the ſurgeon's inſtruments, I muſt place an Inhaler, to be uſed in caſes of Cynanche tonſillaris, or inflammation of the throat. From the nature of a ſoldier's life, it is reaſonable to expect this will often happen. I have found it a very common diſeaſe. Mudge has given us an uſeful machine for this purpoſe. † But for regimental practice, it is not only too expenſive, but likewiſe too liable to need repairs, which every mechanic is not capable of making. As a convenient ſubſtitute, I have uſed a tube made of tin, for ſome years, which I find anſwers extremely well; and it is not only cheap, but ſtrong, and can be

* Vid. Bell's Surg. vol. I.

† The merit of the invention of this inſtrument has been generally given to this gentleman, but improperly.—The ingenious Mr. Arden, Lecturer in Experimental Philoſophy, is the inventor. It was with him Mudge firſt ſaw it, and, as he declares, upwards of twenty years ago. Mr. A. ſo long ago, had applied it with ſucceſs in ſeveral caſes. There is a clergyman in this place, who ſaw it with Mr. A. ſo long ago, as I have mentioned, which is many years before Mr. M.'s Eſſay on the Catarrh appeared. Mr. M. is ſaid to have improved it.

opposite p. 203. Vol. I.



A. *The inhaling Tube* .....

B. *The part to be applied to the Mouth*..

C. *The part to be placed over a Tea-Kettle full of hot Water, &c* .....

The part B *to be wrapp'd round with a little Tow, to keep the Metal from scalding the Patient's Mouth*.....

be conveniently carried in the medicine cheſt. It is in form of a retort funnel; the mouth ſo wide, as to cover the mouth of a common tea-kettle; is about a yard long; and the narrow end bent a little for the conveniency of holding it in the mouth. Through this the patient inhales the ſteams of warm water, either alone, or impregnated with the effluvia of herbs, *i. e.* medicated as the preſcriber judges beſt; the wide end being placed over the tea-kettle, filled with the boiling decoction. Three or four of theſe ſhould be provided, as they will coſt little above a ſhilling a-piece.

I muſt not omit here another inſtrument, as uſeful as any I have yet mentioned. This is a Tourniquet. It may ſeem ſtrange I ſhould mention what is ſo common; but though it be one of the inſtruments now in almoſt every body's hands, that pretends to ſurgery, it is not always found in regimental practice. I have ſeen repeated inſtances here where its uſe was indiſpenſable, and where very clumſy, and indeed inadequate ſubſtitutes were had recourſe to in its ſtead. Abroad, and in the field of battle, ſubſtitutes of any kind may be pardonable, as any endeavour, however rough or inſcientific to ſtop an hemorrhage, may be

better than nothing, and occaſionally ſave the patient's life; but in Britain or Ireland, to be ſo ill provided againſt accidents, will admit leſs of an apology; and ſince they are both cheap and portable, the ſurgeon who does not provide himſelf with them is blameable.

A ſtick twiſted in a nooſe may anſwer tolerably well in amputations in hoſpitals, and the like, where ſkilful aſſiſtants are always employed to make the preſſure leſs or more, as it is neceſſary. I know ſuch are uſed in very reſpectable hoſpitals in London; but ſtill this is different from the army. Beſides, there are occaſions when preſſure of this kind is to be applied for a length of time—for many hours together. Here a nooſe is almoſt inadmiſſible, for more reaſons than one. If a perſon is ſet over it, to hold it, as is ſometimes the caſe, it becomes a tireſome duty, and ſome neglect may happen detrimental to the patient. A ſingle twiſt more may make it too tight, and create uneaſineſs; one leſs may leave it too looſe, and allow the hemorrhage to continue. With a tourniquet this is not the caſe; it may be adjuſted to the greateſt nicety by the ſcrew; nor is there any fear of its giving way. In large wounds, where one or more arteries have been injured, and cannot

not be ſecured by the needle, it becomes neceſſary to apply a preſſure. Here the tourniquet is found much more convenient than thoſe methods hinted at above.

The advocates for preferring a nooſe, will ſay, the ſcrew or the garters may break in the time of being applied, and a fatal hemorrhage follow before the tourniquet can be mended. But we have ſhown that an hemorrhage is much more likely to take place in the other. If the buckle and garters of a tourniquet be well made, which it is the ſurgeon's buſineſs to inſpect, their giving way during application will very ſeldom happen.

While I am mentioning this inſtrument, I muſt not omit to recommend one lately invented by Mr. Savigny of Pall-mall. It is contrived on the ſimpleſt principle; is light and eaſy to carry in the pocket as well as on the part to which it is applied. Its bulk and weight is not more than that of a common ſnuff-box. It is better ſuited for practice in general, as well as for the army in particular, than any other I have yet ſeen. I ſhould think it highly proper that not only every officer ſhould be provided with one, but alſo every ſerjeant in a company; and when they are to go on duty (I ſpeak of actual ſervice) they

ſhould

ſhould be as indiſpenſible a part of their accoutrements as their muſquet and bayonet.

I need not heſitate a moment in ſaying, that lives, and thoſe valuable ones, have been loſt thro' want of a proper contrivance to ſtop immediately a wounded blood veſſel. At the ſiege of Valenciennes, which will be long memorable for its well-fought obſtinacy on both ſides, I fear this remark, in one inſtance at leaſt, was verified. A noble youth, then an officer in the allied armies beſieging this town, received on duty a wound in the thigh from a piece of a broken ſhell, which proved mortal. He ſurvived, however, ſeveral hours, and his death was occaſioned, as far as my inquiries have been able to reach, not from the wound, ſimply conſidered, but from the effuſion of blood. He lived, as I am informed, about eleven hours; and the bleeding continued, it ſeems, leſs or more, all that time. When he grew faint thro' loſs of blood, ſpirituous liquors in large quantities, it has been affirmed, were given by thoſe about him, to remove this ſymptom, which could only add to the effuſion already mentioned. Medical men, no doubt, came to his aſſiſtance as ſoon as poſſible; but already a loſs, as the event

event ſhewed, had been ſuſtained too great for the powers of life to overcome. Every ſurgeon knows that wounds in the thigh, unleſs near the groin, will admit of the amputation of the limb, and thus give a chance for life to be ſaved. It is well known that an amputation of the thigh is a common operation. I have not heard that this wound was ſo high up as to take away all hopes of a cure by this means, provided the blood could have been ſtopped, and ſurgeons procured ſoon enough to perform the operation.

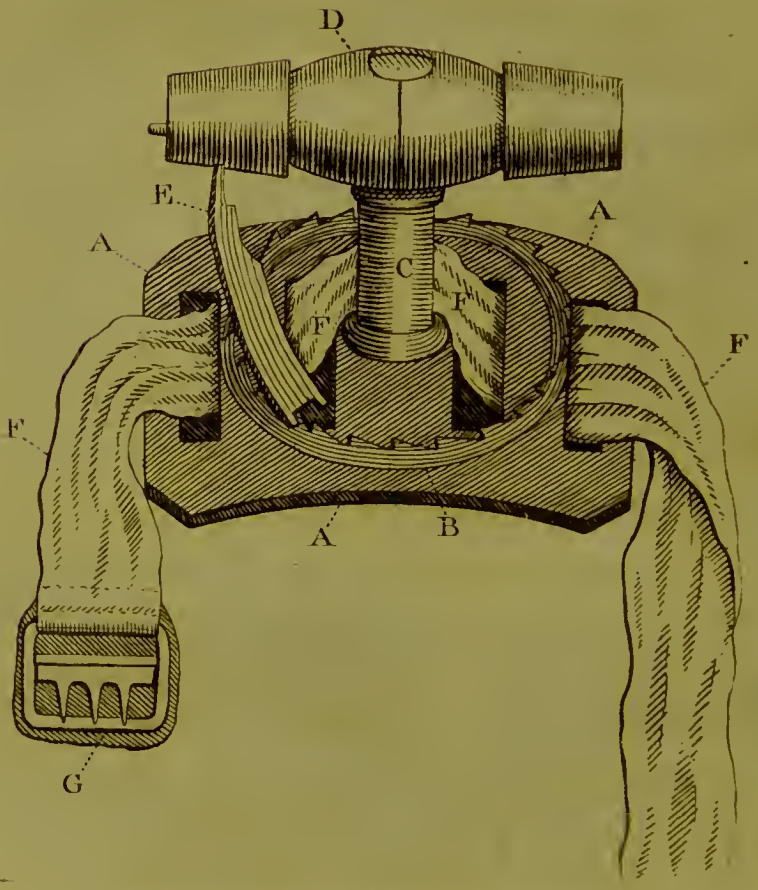
The corpſe of this young officer was brought from the Continent, to be depoſited in the family vault in Suffolk, where his noble relations reſide. On its way, it lay in ſtate at Ipſwich a night, and part of a day, which gave me an opportunity of inquiring into the circumſtances of his death from perſons who ſaid they were on the ſpot when the bomb fell.

The price of the inſtrument which I am recommending can be no objection to its uſe, ſince it is ſo moderate that four may be purchaſed for twenty ſhillings, a number perhaps ſufficient for a company; and the mode of application is ſo ſimple and obvious, that,

when

when once ſhewn, it muſt be inſtantly comprehended by the meaneſt capacity.

It conſiſts of a piece of thin metal, reſembling the rim of a common ſhoe-buckle, and about the breadth of half an inch. On the convex ſide is placed a ſmall rack-wheel, of a circular form. In the common centre of this wheel and the metal rim ſtands a perpendicular metal pin, of about an inch long; on the top of this is placed a little wooden handle, for the purpoſe of turning it, in form, and about the ſize of the handle of a common cork-ſcrew; to this is fixed another ſmall metal pin, reaching to the rack-wheel, and forming a check to it, but moveable, ſo as to ſlacken the inſtrument by the finger and thumb at pleaſure; while the turning of the piece of wood by the hand gives it the proper degree of tightneſs. Over the little wooden handle paſſes a piece of broad tape, of a yard in length, running through a ſlit at each end of the broad rim already mentioned, to one end of which is fixed a buckle, and a ſmall cuſhion or pad, to be placed on the veſſel in the common way. In applying this inſtrument, the tape becomes twiſted ſomewhat on the ſame principle of the common nooſe and ſtring above-mentioned:


D
E
A
A
C
F
F
F
F
A
B
G

A. A. The broad metal rim reſembling a ſhoe-buckle.

B. The circular rack-wheel placed on the convex ſide of the rim.

C. The moveable centre pin.

D. The croſs wooden handle that turns it.

E. The moveable metal check pin which runs on the rack wheel, with one end fixed by a ſmall moveable ſpring to the end of the croſs wooden handle.

F. The tape fillet to be lifted up and placed over the wooden handle D. when about to be uſed.

G. The buckle and pad to be placed over the wounded artery in the common way.

tioned ; but to ſuch of our readers as have not ſeen the inſtrument itſelf, and may not ſufficiently comprehend this deſcription, I ſhall annex a ſmall drawing.

Bed-pans were never uſed in regimental practice, as far as I know, till I formed a contrivance of this ſort. Obſerving the great inconveniences the patients were often put to in getting out of bed, when nature's calls required ; that in a ſtate of great debility in fevers, the toſſing and irritation they ſuffered from being lifted was hurtful, I contrived a cheap bed-pan of tin. In form it reſembles very nearly the common pewter ones. It is ſmaller, and the tin folded down towards the inſide, by which it is ſo rounded as to prevent inconvenience from the edges, while the patient has it applied under him. A few of theſe ſhould be kept; three or four are enough. They ſhould be procured at the expence of the regiment, not at the ſurgeon's, and may be reckoned among the hoſpital utenſils. They will only coſt about 1s. 6d. each, and will be found of very great ſervice in acute diſeaſes.

Under the head of inſtruments, I muſt place bleeding cups, with tape bandages to bind

up the arm before V. Section. Though cups might likewiſe be procured for a trifle, yet I believe they are ſeldom found in regimental practice. I mean cups containing ſpecified meaſures, ſuch as are uſed by ſurgeons out of the army. Human blood is not to be ſported with. We ſhould never at one veneſection take more than is judged ſufficient to anſwer the end; nor are we to take leſs. But how can this juſt medium be ſtruck, when the blood is either received in a large veſſel, the meaſure of which we are unacquainted with, or, which is the ſame as to effect, unable to aſcertain when the proper quantity has flowed into it; or it may be, the blood flows on the ground.—This laſt I believe ſeldom happens; or when it does, it is in emergencies only.

A greater miſchief will happen from taking too much, than too little blood. We can eaſily repeat our operation, if we find, by the appearance of the blood, and other ſymptoms of the patient, too little has been drawn off. But we may never be able to repair the miſchief done by too large a V. S.

When large V. S. are inſtituted even with propriety, they never fail to induce debility. The ſyſtem is always left in a ſtate of weak-

neſs

neſs proportioned to the quantity loſt. In pleuriſies, where it becomes indiſpenſably neceſſary to draw off large quantities to preſerve life, or obviate chronic diſeaſes that may induce certain, though ſlow death, we find the patient long convaleſcent, and health tardily eſtabliſhed. In other fevers, where the energy of the brain is more affected, and where the nervous ſyſtem chiefly ſuffers, if incautiouſly had recourſe to, it renders thoſe functions weaker, and more languid, whoſe powers were already too much ſunk. Common obſervation has eſtabliſhed the truth of this remark.

When the ingenious writer of a pretty little novel *, lately publiſhed, makes Lindorf, one of the characters of the piece, give a narrative to his friend, the Count de Walſtein, of what had happened to him from their laſt ſeparation, he ſays, " Quelques " heures après mon arrivée," (à Hamboure) " je fus ſaiſi d' une fièvre ardente, qui dura " pluſieurs jours ; un médicin que l' hôte fit " appeler, me fit ſaigner ſi abondament, qu' " une foibleſſe exceſſive ſuccéda à la fièvre, " et retarda mon depart."---It was neceſſary

* Caroline de Litchfield. Tom. 2. p. 210.

to detain this young nobleman here ſome time; he is therefore thrown into an inflammatory fever. The landlord of the inn where he lay calls an ignorant practitioner to his aid, who bled him ſo largely, and weakened him thereby ſo much, that it was long before he recovered its debilitating effects to be able to purſue his journey; as probable a means ſurely for the purpoſe, as any the writer could have deviſed.

Perkins, a young man about twenty-two, of the light company, was admitted on the ſick liſt in the beginning of the ſpring 1781. His complaints were chiefly pains acroſs his loins, with ſome, though little pyrexia; the pains were what he complained moſt of; they were looked on as rheumatic; the weather had been cold, and the drill duty, for ſome time, ſevere, eſpecially to recruits, and he had been but a few months in the regiment. He was blooded immediately; a pound at leaſt was drawn off, and ſome febrifuge medicines adminiſtered; he was put to bed; but by next morning a total paralyſis from the middle downwards had taken place.

Coagulable lymph appeared indeed ſeparated on the ſurface of the blood; but it was plain

plain V. S. had been profecuted too far. The deed was done: it could not now be remedied. Eight ounces might have proved ſerviceable, but double this---for he muſt have loſt double ---was beyond what his habit could bear with impunity. The blood flowed into a large tin veſſel, uſed for culinary purpoſes; the exact meaſure unknown, and the quantity therefore taken away by gueſs. Every means was uſed now to reſtore ſtrength to the habit, and recover the loſt tone of the extremities: all in vain: he grew daily worſe. The inteſtinal tube, with the urinary organs, partook ſoon of the affection; both fæces and urine paſſed involuntarily; he became emaciated; and, to add to this, by conſtantly lying in one poſture, except when turned by the orderlies, both the bones of the ilia and hip burſt at length through the ſkin. In ſome time, notwithſtanding every care, theſe and ſome other ſores produced, in the neighbouring parts by the ſame means, mortified. He lingered two or three months from the firſt in this miſerable condition, when death at laſt put an end to his ſufferings.—It appeared to me, the whole train of theſe evils were to be attributed to the too great loſs of blood;

and that a more ſparing uſe of the lancet, with the exhibition of ſuch medicines as were afterwards adminiſtered, would have ſoon reſtored him to his health and his duty.

To obviate the inconveniency that may ariſe from ſuch gueſſed work, it is very eaſy to procure cups of tin, or pewter. Theſe may be as conveniently carried about with the regiment as the ſkillet or kettle; even much eaſier, as they are of a leſs ſize. We ſhould, I think, have the following, *i. e.* one of eight ounces; one of four, and one of two. Theſe three will anſwer every purpoſe. Suppoſe we intended to draw off a pound of blood, our eight and four ounce cups make juſt the quantity; if ſix ounces, our four and two amount to it; if ten, our eight and two; if twenty, (for ſuch large bleedings may ſometimes be neceſſary in great degrees of active inflammation, and in plethoric ſubjects) our eight, four and two, are fourteen. The two laſt may be emptied and again filled, which amount to the quantity required. If we wiſh to let blood to fourteen, or ſixteen, we can compute it in like manner, and thus exactly fulfil the intention.

A few

A few yards of tape are equally neceſſary to bind up the arm before V. Section; for the ſoldiers ſeldom have garters ſoft enough for this purpoſe. They are either liſting of cloth, or other coarſe ſtrings, very inconvenient for this end, as not ſufficiently compreſſing the artery. Their garters may anſwer well enough to bind the orifice after bleeding; for we ſhould not give our bandage for this uſe, as it would be twenty to one if ever they were returned; and to buy on every occaſion when V. S. was to be performed, would at length become expenſive. As to directions in the operation itſelf, this is not my buſineſs to point out. I refer him to books profeſſedly on the ſubject.

Among the inſtruments, I muſt mention a contrivance, which will be of great utility to the ſurgeon; and though, ſtrictly ſpeaking, it does not belong to the head of inſtruments, yet this ſeems the propereſt place to inſert it. This is a bathing tub. The uſe of baths, both hot and cold, will as often be found neceſſary in regimental, as in other practice. A tub may be made at very little expence, which will anſwer every purpoſe of this kind; but it ſhould be at the regiment's, not the

ſurgeon's expence. It may be made from a couple of old arm cheſts, and of the ſame ſhape, about four feet deep, and of ſuch a length, that the talleſt man of the regiment can ſtretch himſelf in it. Nor ſhould it be any wider than juſt to allow a man to turn eaſily. To make it water tight, it muſt be caulked. Made in this manner, a ſmall quantity of water will ſuffice. When the hot bath is wanted, the water may be heated with little inconvenience. On marches, it will ſerve to pack ſome of the baggage in, and thus anſwer a double purpoſe. When ſoldiers are convenient to the ſea, they ſhould bathe in it; but this is not always the caſe; then it may be neceſſary for cold bathing.

I ſhall paſs over cupping glaſſes, and ſcarificator, as they naturally make part of a ſurgeon's inſtruments. I am ſure they ſhould be always included. Very great advantage is derived from them in caſes of local pains, where topical congeſtion and inflammation have taken place, perhaps more than from any other means whatever.

Leeches cannot be conveniently carried on marches: but every town will ſupply them when

when wanted. I conſider them likewiſe as a part of a ſurgeon's inſtruments. It is enough here only to hint their utility; every medical practitioner is convinced of it. I have purpoſely omitted an enumeration of every inſtrument which a regimental ſurgeon ſhould poſſeſs, becauſe I have comprehended the whole under the words *proper ſets*, which every inſtrument-maker knows, and which are generally ſold together. The particulars I have pointed out are ſeldom attended to, though not leſs neceſſary: indeed they are almoſt daily called for; and at leaſt nine times out of ten, where we employ the amputating knife, ſhall we have occaſion to uſe theſe.

Among his inſtruments, I ſhall place likewiſe bandages. The chief complaints where theſe are uſed, are for ſore legs: and I would prefer ſuch forms of them as are recommended by Rowley, Underwood, and others, who have written on the ſubject of ulcers of the lower extremities. A regimental ſurgeon ſhould be provided with a proper number. When the frequency of this diſeaſe is conſidered, a dozen is the leaſt he ſhould have in his cheſt. As authors have given proper direc-

tions

tions for making them, I muſt refer my readers to the writings of thoſe gentlemen. I have hitherto neither ſpecified Catheters, male nor female, though both ſhould be in his poſſeſſion.—He will find frequent uſe for the male catheter among the ſoldiers; and ſince the women of the regiment will often call him in their ſickneſſes, he will as often ſtand in need of his female catheter. The ſmall expence that the female catheter will ſtand him, will be amply compenſated by the good name he will obtain among this part of the army. Officers are always well pleaſed to ſee their ſurgeon attentive to the poor ſick women; as they know he is not obliged to attend them, it impreſſes their minds with the greater opinion of his humanity.

He ſhould always be provided with a good accurate thermometer. This will be uſeful on many occaſions. He may by this not only aſcertain the patient's heat in fevers, but the temperature of the air, room, &c. the temperature of the water applied in the hot bath, which is abſolutely neceſſary, and many things of this ſort.

I have taken no notice of ſyringes; but I am of opinion they are not leſs uſeful than

ſome other things enumerated under the head of inſtruments. Injections are much in uſe for the cure of gonorrhoea, and very properly, when not depended on entirely as a cure in virulent caſes of it; or where there is a true venereal infection. In relaxations, &c. they anſwer happily. He ſhould have at leaſt a dozen always ready to lend out to the men, but under a penalty, if loſt. Pewter ones are cheapeſt, and anſwer very well. He will find occaſion for them in other caſes, beſides this, viz. in ſyringing the ears, in ſquirting medicines into, or waſhing out ſinuſes, &c.

Carbonic acid air has for ſome years paſt been much recommended in phyſic in febrile diſeaſes; and it proves to be no inconſiderable medicine not only here, but in many other affections. Some convenient apparatus, better adapted to the uſe of the army, than thoſe in common uſe, ſhould be invented; where they would not only be cheaper, but might be tranſported with more facility, and leſs danger of breaking. It matters not whether they be of glaſs, provided they are of ſuch materials as the vitriolic acid cannot corrode, or at leaſt corrode without imparting a quality or impreg-

impregnation to the water, injurious to health. As we uſe iron to give the water a chalybeate quality, which adds conſiderably to its virtue, perhaps our apparatus might be made of this metal.---That invented by Dr. Prieſtly, in the rude days of the diſcovery, may, however, anſwer; and it may be eaſily procured any where, or almoſt in any ſituation. In the army, elegance muſt give way to convenience in many things. This may be found deſcribed, and a drawing of it preſerved, in Elliot's treatiſe on Mineral Waters, where both Dr. Prieſtly's pamphlet on the ſubject, and the apparatus, are tranſcribed, and to it I refer. But in the adminiſtration of fixable air in putrid fevers, and ſuch like, perhaps the method mentioned in the Commentary on the ſubject by Dr. Dobſon, may ſtill be preferable. It ſeems at leaſt more advantageous than the common neutral draughts, made by mixing the acid and alkali previous to exhibition, where ſo much of this valuable gas, on which the greateſt part of the good effects of the medicine depends, evaporates by the act of effervescence.

The manner directed in this commentary is extremely ſimple. A certain quantity of alkali

alkali is firſt diſſolved in ſome water, then drank, and as much acid, either of lemons or diſtilled vinegar, as we know a priori, capable of ſaturating the alkali, is immediately to be ſwallowed. The extrication of the fixable air muſt take place in the ſtomach, and unite, with the contents of it, and otherwiſe be abſorbed in greater quantity, and more effectually, in the ſame ſpace of time.

Since the electrical fluid bears ſo large a ſhare in the operations of animal and vegetable life, as our late diſcoveries with regard to it evidently ſhow, it is but reaſonable to ſuppoſe that health is greatly influenced by it; and indeed experiments inconteſtably prove the fact. Its permeability, which is perhaps beyond all other fluids in nature, would ſeem to render it almoſt the only effectual remedy in ſeveral diſeaſes. In ópthalmies íts utility is atteſted by many well authenticated cures.* In chronic rheumatiſm, we are told, it has proved a cure after all the articles of the Materia Medica ever preſcribed for this complaint have failed. It has alſo been found no leſs uſeful in hemiplegia. In the form of lightning,

* See Cavallo, on Med. Elec.

ning, it has diſcuſſed tumors on the breaſt.* This happening accidentally, perhaps gave riſe to its application to indolent tumors of a ſchirrhous nature, which we often find it ſucceſsfully remove. We know alſo its beneficial effects in paralyſis, as well as other diſeaſes where the nervous ſyſtem ſeems chiefly to be the ſeat of the complaint. It has alſo removed deafneſs, a caſe of which we find related in the Med. Comment. vol. 1. p. 370.

Since all theſe often occur among ſoldiers, regimental ſurgeons ſhould undoubtedly have contrivances for its application. The many portable machines for electrical purpoſes, now in common uſe amongſt all claſſes, and made by common mechanics, render its application in the army not only practicable, but eaſy and convenient, while the cheapneſs is no ſmall inducement to their purchaſe. I have ſeen very neat ones, the glaſs cylinder, from a foot to fifteen inches in circumference, ſold for little more than a guinea, with conductors, knobs to draw the ſparks, chain, Leyden phial, &c. Theſe are made ſo portable, that they

* See Bohadch. de util. Electric. in Art. Med.

they may be packed up in a box about a foot and half long, and ſo commodiouſly at the ſame time, that little is to be feared from the jolting of the waggons in marches, with reſpect to their breaking. To theſe ſhould always be added an Electrometer, as it is abſolutely neceſſary to know the ſtrength of the electricity, leſt a neglect in this point ſhould be followed with diſagreeable accidents, and bring its farther application unmeritedly into diſrepute.

Fomentations, ſhocks, and ſparks, are the three ways commonly now had recourſe to in its application to the human body. The operator ſhould be properly acquainted with the nature of conducting theſe, in order to render the electricity as effectual as poſſible; and for this reaſon it will be expedient that he apply himſelf a little to the ſtudy of electricity. What is neceſſary for his purpoſe, *i. e.* its general ſtimulant effects, he may in a ſhort time comprehend, and practice will render him ſufficiently expert in its application. It is not abſolutely neceſſary that he ſhould be a deep Electrician, though the more he knows of this branch of natural philoſophy, the more he will know of nature; and will the

better

better underſtand how to vary the application to accompliſh his intention.

That it is a powerful ſtimulus is proved from the perſpiration it induces on the part to which it is applied ; and that it conſtantly, as well as intimately pervades the body, is likewiſe demonſtrated from applying it to a perſon during V. Section. If the blood only falls in drops from the vein, let the perſon be electrified, and it will now run in a full ſtream. If a capillary ſyphon be filled with water, which from the ſmallneſs of the tube can only fall from it in drops, let it be electrified, and the water will iſſue from it in a number of ſeparate fine ſtreams.

It renders bodies lighter, whether ſolid or fluid. To prove this, we have a number of experiments by Bohadch. I ſhall not take up the reader's time by a detail of them, but only preſent him with ſome of the author's concluſions, which are, " that electricity encreaſes the natural evaporation of fluids, unleſs ſuch liquids are poſſeſſed of a great degree of vicidity, as is the caſe with olive oil :

" That this encreaſe in the evaporation of liquids, produced by electricity, is in proportion to their degree of volatility :

" That

" That this encreaſe of evaporation, ſo produced on liquids, is in proportion to the extent of their ſurfaces, expoſed to the atmoſphere; and that electricity has an evident effect in diminiſhing the weight even of ſolid bodies, when ſuch a quantity of moiſture is contained in them as is neceſſary for the purpoſe of evaporation."

He produces an experiment to prove, that electricity being applied for ſome time to veſſels replete with fluids, an encreaſed diſcharge of their contents is thereby always produced. This is ſimilar to what we have already ventured to aſſert; but as an illuſtration, I ſhall relate his experiment.—" Let a " common egg," ſays he, " be perforated at " one end, ſo as to diſcharge all its contents, " both the white and yolk; and a ſyphon be- " ing introduced ſo as not to touch the bottom " of the egg, let it be completely filled with " water, and then weighed: the egg is then " to be emptied by making the water paſs " through the ſyphon, and by weighing again " it may be known exactly what quantity of " water is diſcharged in a given time. The " egg is now to be filled again, and on being " electrified for ſome hours, the water con-

" tained in it will be found to flow with much " greater rapidity than when no electricity was " applied."

The ſame author has taken ſome pains to ſhow its effects in promoting vegetation; but this being foreign to the preſent purpoſe, ſhall be paſſed over. Afterwards, he goes on to prove, by various experiments, the power of electricity in promoting the natural perſpiration of animals. Theſe were made on whelps, pigeons, and other living creatures, all which demonſtrate the great activity of this fluid, and its power over the body.*

Some contend that electricity poſſeſſes a ſedative, as well as a ſtimulant power. This they affirm is proved from its effects in eaſing pains. Shocks and ſparks, ſay they, act by a ſtimulant power, while the aura, or electrical fomentation, gradually received into the body, acts ſedatively. Whether this be fact or not, we ſhall not ſtop here to enquire. From the power, however, it poſſeſſes, of intimately pervading the fineſt tubes, it has been ſucceſsfully applied to diſcuſs obſtructions of the glands. We hinted at this before. Hence it

* Vid. Bohadch de utilit. Electricit. in art. Med. ſeu in morb. Curand.

it has been found, that venereal buboes have been more ſpeedily removed by it, than by any thing hitherto known. In the ſummer of 1782, an ingenious* phyſician told me of a very obſtinate caſe of this kind completely diſcuſſed by electricity in about three days.—Some have little faith in it; but becauſe it does not cure all caſes to which it is applied, is that a reaſon for altogether rejecting it?

If there was no other diſeaſe in which it was ſucceſsful, but in buboes, this one alone, ſo frequent and ſo troubleſome in the army, ſhould induce us to try it. Every practitioner in the army knows too well the many inconveniences that daily ariſe from buboes both to himſelf and the patient. For my part, they have proved in my practice, far more troubleſome than any other venereal ulcer I meet with.

Whatever ſome may advance to the contrary, I am perſuaded, no advantage is obtained by encouraging ſuppuration by the application of poultices. As it is never ſafe to truſt to the diſcharge of a buboe, for the

* Dr. Macqueen.

compleat expulſion of the venereal virus, but highly neceſſary to adminiſter its well-known antidote, mercury, we need not be anxious whether abſorption from the inflamed glands ſhould take place. The mercury meets the poiſon, and will deſtroy it. On the contrary, let us ſuppoſe the buboe opened, and a collection of matter diſcharged; are we ſure no abſorption takes place to infect the ſyſtem? Can we boldly venture to affirm, that the virus is all expelled at the opening? What hinders abſorption now? Nay, I am apt to think this the readieſt time for it to be performed. We know that in the inoculation for the ſmall-pox, abſorption of the virus does not take place till after ſuppuration, and a multiplication of the matter inſerted. This is proved by the infected piece having been cut out after the inflammation had begun, and by this means the ſmall-pox prevented.—Now, as a multiplication of the matter happens in the buboe, and as we muſt allow that every particle of it is tainted, the lymphatics muſt take ſome of it up, and convey it to the blood. Beſides, there is reaſon to ſuppoſe the abſorption will go on in proportion to the ſurface laid open. Hence this operation

of

of the animal œconomy muſt be even greater after the buboe is opened.

If this be true, it follows, that we ſhould never truſt the cure to a ripened buboe, but always give mercury. If the buboe be ſo far advanced, before we ſee the patient, that a fluctuation of matter is perceptible, and diſcuſſion impracticable, it appears to me a ſafer way to allow it to burſt, than to open it either with the knife, or with cauſtic. Although I never ſaw an accident from this which ended in death, yet ſuch have been ſaid to happen. A large and principal artery lies in the courſe of the gland, where the matter generally forms. If we ſhould inadvertently run the knife too deep, and wound it, death muſt be the conſequence, as I ſee no way by which the hemorrhage could be ſtopped; and in different ſubjects this veſſel is differently ſituated. In one it lies deep, and out of the way; in another not only more ſuperficial, but may otherwiſe vary in its courſe. But ſuppoſing the wounding of this veſſel eaſily avoided; to heal up the part is often found impracticable. I have ſeen buboes for many months continue to diſcharge. I have ſeen ſinuſes form, and the ſore often put on very alarm-

ing appearances. In the autumn of 1781, I had a female patient, who died from a mortified buboe. She was a girl of eaſy virtue, and had been neglected till the mortification had actually taken place. When I ſaw her firſt, ſhe was in a high fever, and not knowing either her way of life, or that ſhe laboured under a venereal diſeaſe, I preſcribed for her fever only. The diſagreeable odour in the room, I attributed to fæces left in the pot, and ordered the room to be cleaned out, and theſe removed. She lived alone, but had a father in the neighbourhood, who now came to ſee her. As ſhe was conſidered by ſeveral, equally ignorant of her way of life with myſelf, in the light of a poor unfortunate girl, that had got a fever, ſome well-diſpoſed perſons, hearing of her diſtreſs, ſent her nouriſhment; and a ſmall collection of money was made for her. On my next viſit, her father took me aſide, on complaining that the ſmell ſtill continued, and informed me of a *ſore ſhe had on her thigh*; on examining I found one of the moſt diſagreeable ſores in her groin I had ever ſeen.

She confeſſed the nature of it; that ſhe had been ill of it ſeveral months, and that nothing applied could heal it. I dreſſed it, though a moſt

moſt diſagreeable taſk; but the fever ran high, and the mortification had proceeded too far, having penetrated quite through the abdominal muſcles, and her ſtrength ſinking, ſhe died in a ſhort time after.

I was informed by a phyſician of veracity, in December 1783, of a friend of his in Edinburgh, who has ſuffered in a moſt ſevere manner from the ſame cauſe. It is upwards of two years, he ſays, ſince the buboe was opened, but no medical treatment has ſucceeded in healing it, though the moſt eminent of the faculty have given their advice. The motion of the thigh is now greatly impeded, and it will be well, my informer adds, if the limb, in ſome time, will admit of any.

A ſurgeon of a militia corps informed me, in 1782, of a ſoldier that died from the ſame cauſe. The gentleman already mentioned * told me, while he attended lectures in Edinburgh, he ſaw a caſe of the ſame kind, of a very obſtinate nature, under the care of Dr. Hope, that had very nearly proved fatal to the patient. And I may add one in my own practice. In autumn of 1782, Wright,

* Dr. Macqueen.

a grenadier, affected in a ſimilar manner, was put under my care. The part mortified, and with great difficulty the progreſs was ſtopped by the uſe of hemlock in poultice, applied over the ſore, and ſtupes of the warm decoction of the plant. He had been ill, it ſeems, near two months before I ſaw him, and he was after this near four months in the hoſpital before he could leave it to do his duty.—The caſe is as follows:

In the month of Auguſt 1782, Matthew Wright, a grenadier, was ſent under my care for the cure of a venereal buboe. His general health was, when he came in, pretty good, and there were no other marks of the venereal diſeaſe about him. On further enquiry into his caſe, I found he had been ill at St. Alban's, where he contracted this buboe, and where about two months before it had been opened by the ſurgeon then attending the regiment.

He had been ſomehow neglected after the opening was made; the ſurgeon perhaps ſuppoſing that nature would perform the reſt of the cure, without any farther interpoſition of art.

In

In the mean time, the regiment to which he belonged was ordered to encamp on the Suffolk coaſt. This was a long march for a perſon in his ſituation ; they halted, however, at Newmarket for ten days ; yet nothing was done till he was ſent to the hoſpital in camp.

On examining into the ſtate of the ſore, I found that part of the opening made had cloſed up ; but a ſinus was formed upwards of two inches and a half long, ſtretching upwards towards the abdomen, running between the ſkin and the muſcles. I tried for ſome weeks to dry up the diſcharge, which was pretty copious, and heal up the part ; but my endeavours were in vain, and his general health, probably from confinement, as well as from the diſcharge, was diminiſhing apace, and he grew conſiderably emaciated.

I reſolved at length to lay the ſinus open, which being done, I found both a calloſity and blackneſs in the courſe of it. This I endeavoured to remove, by Tinct. of Myrrh, and the Green Digeſtive ; and at laſt red precipitate was ſprinkled over it. All would not do. He was carefully dreſſed twice a day by myſelf, for I would truſt him to no other ; and

and over the dreſſings were applied poultices of bread and milk, to bring down the inflammation that ſurrounded the ſore. All this was ſtill to no purpoſe. The diſcharge encreaſed, was fetid and ill coloured, and I feared a gangrene and mortification, not only from the ichor and general appearance of the ſore, but from the inflammation that ſpread to a great diſtance round it over the integuments. He had till this time taken a mercurial pill of two grains, night and morning, ſince he came into the hoſpital, but it was now left off.—He ſuffered much; neither could he enjoy any refreſhing ſleep, or mitigation of his pain, though he had got opium from one grain to four at a doſe. I put him upon a courſe of bark and wine, and encreaſed each till he drank a bottle of the one, and took an ounce and half of the other daily. The ſore not only now ſpread, but ſunk deeper into the muſcular ſubſtance.

The integuments ſeparated entirely from them up to the os ilium, and forwards on the abdomen, towards the umbilicus, ſo that by lifting up the edge of the ſkin, a great part of the abdomen on this ſide could be ſeen under it. The cellular ſubſtance con-

necting

necting them together, melted down, while the gangrenous purpureo-ſcarlet colour ſtill advanced externally.

I applied now every means in my power to obviate mortification. The medicines already mentioned were adminiſtered with punctuality, and ſtupes, compoſed of decoction of camomile flowers and wormwood, were applied as warm as he could bear them, an hour at a time, three times a day.

Hot flannels wrung out of them were clapped over the ſore, and as ſoon as one grew cold, another was applied, which, from the penetrating nature of the vapour, I judged would infuſe their antiſeptic qualities better than if the decoction itſelf had been uſed. When this was finiſhed, warm digeſtives were laid on, and over all a large poultice of bread and ſtale beer, renewed likewiſe three times a day. To this was added a generous diet, for his appetite did not fail ſo far as to prevent him from eating pretty ſtrong food.

Want of ſleep, and apprehenſion perhaps of his own danger, had rendered his pulſe quick and weak, though he had nothing that

he

he called ſickneſs, ſave the uneaſineſs from his conſtant pain.

I ſtill continued to flatter him with hopes of a cure, to prevent depreſſion of ſpirits as much as poſſible, which is always an enemy to recovery from any illneſs whatever.

While things were in this deſperate condition, I called at Yarmouth, on the ingenious phyſician, then of that town, already mentioned. I related the caſe to him, while he in return related to me one of a ſimilar kind from the ſame cauſe, (and a ſoldier alſo) which he had ſeen in the Royal Infirmary of Edinburgh, and which was cured by hemlock poultice.

I procured a quantity of the ſtalks, made a ſtrong decoction of them, with which I ſtuped his ſore, as warm as he could bear, for about half an hour; then took a ſyringe, and threw it underneath the ſeparated ſkin, where the ſtupe could not reach, applying the warm hemlock poultice, boiled up with ſome crumbs of bread over all, making it ſo large as to cover the whole enflamed part.

This was about 11 A. M. and about 3 P. M. theſe were removed, and the ſame treatment repeated. About eight the ſame evening

evening this practice was again had recourſe to, and he got only a pint of wine this day. Next morning, when the dreſſings were removed, I found almoſt all the inflammation gone from the integuments, the ſore emitting a leſs diſagreeable ſmell, though I could not ſay the diſcharge of ſanies was leſſened, nor the colour of the ſore more favourable. The ſame treatment was continued this day, with the addition of a ſcruple of pulvis cicutae, made into a bolus, with honey. I leſſened the quantity of bark to ſix drams, and from this to three in a ſhort time after.

He ſlept a little this night, which he had not done from the intenſe pain for many nights previous to this; and the ſucceeding night ſtill more, till his reſt gradually became as refreſhing as in his former health. The wine was gradually left off alſo. In ſhort, by purſuing this treatment, in three days the inflammation was not only entirely gone, but the wound ſweetened, and altogether cleanſed from the blackneſs that had all this time adhered to it; for the ſloughs fell off, leaving the recti, and oblique muſcles, red and well looking, though the mortification had penetrated quite through them. From this time

he

he continued every day to mend. Had not this plan been happily hit on, I am confident he muſt have ſunk in the ſpace of forty-eight hours, at moſt, from the time this application was firſt made.

Since this I have experienced the good effects of hemlock water and poultice in two caſes of ulcerated legs, both of which were in a very bad condition, being extremely foul.

I doubted for ſome time whether I was to attribute the cure to the hemlock poultice and powder, given internally, or to the water with which the ulcer was ſyringed. A fourth caſe of venereal ulcer, however, ſoon came under my care, which happened very fortunately to put this to the teſt.

The ulcers were extremely foul on each ſide above the os mali, or about the temples. Neither powder nor poultice was applied, but they were carefully ſyringed twice a day with the decoction of hemlock, and in a ſhort time they began to mend: from whence I conclude, that the hemlock water applied to foul ulcers, not only cleanſes and diſpoſes them to heal, but mitigates the pain, proving beneficially ſedative.---The ſyphilitic patient,

 I now

I have now mentioned, ſuffered for a long time much pain from theſe ulcers, which were under the care of a regimental ſurgeon, and only dreſſed with common digeſtives, till he was ſent into the hoſpital.

Thus far of the dangerous effects of opening buboes. Was it neceſſary to give more authorities, of their bad effects, I might quote Plenck. Theſe, however, may ſuffice.

But if the opening of buboes ſtill be inſiſted on, a queſtion ariſes which has been much agitated, whether cauſtic or the knife be preferable. Mr. Pott, whoſe authority is great in all caſes of ſurgery, prefers cauſtic. He affirms from his own experience, that caloſities round the edge of the ſore always follow the uſe of the knife, which never happen from cauſtic. Mr. Sheldon, and others, I have heard confirm the ſame. Yet notwithſtanding theſe authorities, I would venture to ſay, if the buboe be properly ſuppurated, and the integuments rendered ſufficiently thin, it will be of little conſequence whether a knife, the cauſtic, or a puncture made by a lancet, gives vent to the ſuppurated matter.

From

From the unfortunate caſes I have ſeen, I ſhall on all occaſions endeavour in my future practice in this diſeaſe, to diſcuſs buboes; and for this purpoſe in obſtinate caſes I confeſs I entertain conſiderable expectations from electricity. A regimental ſurgeon can never make the labour, requiſite in applying electricity, any objection, ſince he has always men enough at his command capable of giving their aſſiſtance. One or more orderly men are conſtantly in the hoſpital, and with very little trouble they may be taught to apply it ſufficiently well, at leaſt with his inſpecting the whole.

This, which I would place among a regimental ſurgeon's inſtruments, is, as far as I know, little uſed in army practice; but from the ſucceſs that has followed its application in many diſeaſes, beſides what has been mentioned, it is to be regretted its uſe is not more univerſal. Perhaps there may be ſtill diſeaſes for which it has never yet been tried, that might yield to its influence. Time, however, and opportunities of making ſuch experiments, will determine this point. It becomes our duty in the mean time to apply it where we have the teſtimony of experience,

and the aſſiſtance of rational argument to determine in its favour. I know ſome eminent phyſicians who are not very ſanguine in their hopes from electricity; and who contend they ſpeak from being repeatedly diſappointed by it in their expectations. But others, and theſe not a few, ſpeak as confidently on the other ſide; and I am inclined, from what we know of the nature of this ſubtile fluid, to join them in its favour.

CHAPTER IX.

OF THE PERUSAL OF BOOKS, AND OF SOME WHICH SHOULD FORM PART OF HIS LIBRARY.

Books, without doubt, the regimental ſurgeon ought to peruſe. Without an almoſt daily application to them, his practice muſt be mere quackery, and his views confined. We have here the advice of the immortal Bacon to inſtigate us, whoſe opinion, as well as example, we need not bluſh to follow. "Books," ſays he, "will ſpeak, when counſellors blanch; therefore it is good to be converſant with them."*

One principal uſe of reading will be, to know what the medical world are doing; or what they have done; and to repeat their practice, or condemn it, as he ſees fit, and as his own judgement directs him. By reading, he will become acquainted with the opinions of the moſt eminent of the profeſſion; and he may be ſtimulated to excel, as many of the authors, whoſe works he peruſes, have done. By reading, united with opportunities of practice, he will be able to make uſeful obſervations. A correſpondence alſo with reſpectable and learned men of the profeſſion, will

* Bacon, of Counſel.

will enable him ſtill farther to practice ſucceſsfully. He will know all the diſcoveries made in philoſophy, and chiefly diſtinguiſh what more immediately belongs to his own profeſſion. He will obſerve the fallacies of theoretical opinion detected by fortunate facts; for medicine, like other branches of ſcience, is progreſſive; and thence he will be early enabled to form his practice, and rectify it accordingly: while he that reads little, and converſes leſs with men of the profeſſion, muſt go on in a common, though erroneous tract. Thus information will enable him to reject haſty and ill-grounded concluſions, or confirm his doubtful conjectures, which he now ſees were founded on rational induction.

I do not mean here a too deſultory plan, without any regular method. Some object ſhould always be held in view, to which his reſearches ſhould ultimately tend. The learned Zimmerman ſays, "it is not too ex-"tenſive a reading that renders a man learn-"ed. Reading in general impairs ordinary "minds. They ſoon become like a ſieve, "and retain nothing that is thrown into them. "It ſeems right to adopt a middle way be-"tween the two extremes." *

* Experience in Phyſ.

In another place he tells us, what we muſt acknowledge, that " erudition may be diſtin-
" guiſhed from true learning. Erudition,
" conſidered by itſelf, is a mixture of good
" and bad things, often contradictory to each
" other, and badly digeſted; which burthen
" the memory at the expence of common
" ſenſe, and render the ſimply lettered man
" rich in proviſions, that are uſeleſs, and
" poor in ideas; great in minute things, and
" very little in great ones.

" The moſt learned phyſician is therefore
" a very uſeleſs man, if he has not read rather
" with a view to improve his genius, than to
" burthen his memory; and to collect toge-
" ther intereſting truths, rather than to accu-
" mulate words."

" True ſcience," ſaid Plato and Ariſtotle,
" conſiſts not ſo much in knowing and
" adopting what others have known, as in
" judging within ourſelves on what we read or
" ſee. It conſiſts in ſeizing the true ſpirit of
" a thing; in ſeeing it in its true light; in
" diſtinguiſhing what men have added to it;
" in ſtrengthening our judgement, and orna-
" menting our memory; in extending our
" knowledge; and, in ſhort, in being the

" dupes

" dupes neither of men, time, place, nor au-
" thority. This is true ſcience." Erudition and true learning may be contraſted, as a modern poet has done knowledge and wiſdom.

Knowledge and wiſdom far from being one,
Have oftimes no connection. Knowledge dwells
In heads replete with thoughts of other men,
Wiſdom in minds attentive to their own.
Knowledge a rude unprofitable maſs,
The meer materials with which wiſdom builds,
Till ſmooth'd, and ſquar'd, and fitted to its place,
Does but incumber whom it ſeems t'enrich.
Knowledge is proud that he has learn'd ſo much,
Wiſdom is humble that he knows no more. *

I muſt not take on me to point out all the different authors the regimental ſurgeon ought to read. His own judgement muſt in a great meaſure guide him here. But if he poſſeſſes a real deſire for improvement, he will not be ſparing in this point. It has been often ſaid, that to read little, and reflect much, is the ſureſt way to improvement. The rule, I believe, in a general ſenſe, is good. For to read over a certain number of pages, without digeſting them, without making ourſelves

* Cowper's Poems, Vol. 2. p. 235.

maſter of the author's arguments, and entering into his views, is as bad, with reſpect to the improvement we receive, as reading none; for the memory retains nothing of ſuch ſuperficial peruſal, ſince neither the attention nor the judgement were engaged. This may be called reading to kill time; and we might as well peruſe a novel, as a medical author, hurried over in this way. If to kill time be the ſole purpoſe of our reading, it matters not what the ſubject be. Some are conſtant readers, and greedily catch at every thing they meet, yet never learn any thing. There is a middle point, if we can find it, between theſe extremes; and this it is our buſineſs to ſearch after; but proper attention to what we read is undoubtedly neceſſary.

"Attention," ſays the author lately quoted, "may be conſidered as contributing "much to the genius of obſervation. It is a "lens, which being applied to the different "parts of an object, enables us to remark "other parts, which we ſhould not diſtinguiſh "without its aſſiſtance. The more we exer-"ciſe our attention, the more ſhall we diſco-"ver of every object. A botaniſt ſees in a "plant more than other men do. He ob-"ſerves in it what ought to be ſeen; whereas

they

" they (*i. e.* the inattentive) know nothing even " of what they do ſee. Our attention be- " comes more perfect by the advantages we " derive from a habit of obſerving." And this is as applicable in reading, as in obſerving the phænomena of nature.

But another caution will be equally neceſſary, not to take every thing for fact of which books inform us; nor ever to ſuffer ourſelves to be led away by great names. The greateſt men have committed overſights—errors. Let us call to our aid both our judgement, and our experience; and, as often as is in our power, the judgement and experience of thoſe friends, from whom we may expect aſſiſtance. If we follow not this plan, books may prove to us as the poet has deſcribed them, when he tells us they

———Are not ſeldom taliſmans, and ſpells,
By which the magic art of ſhrewder wits
Holds an unthinking multitude enthrall'd.
Some to the faſcination of a name
Surrender judgement, hood-wink'd. Some the ſtile
Infatuates, and thro' labyrinths and wilds
Of error leads them by a tune entranc'd.
While ſloth ſeduces more, too weak to bear
The inſupportable fatigue of thought,
And ſwallow, therefore, without pauſe or choice,
The total griſt unſifted, huſks and all. *

* Cowper ut ſupra.

The choice of authors is a material circumſtance. Time is precious; is ſhort; and ſhould not be waſted wantonly. Durſt I pretend to offer advice in an affair of ſuch importance, it would be to caution thoſe young in the profeſſion againſt engaging with too great a variety of books at once. A few ſyſtematic authors ſhould be firſt well underſtood, as they give a general view of the ſcience. After this, they may, with leſs danger of being led aſtray, deſcend to thoſe who have treated on particular diſeaſes.—This may perhaps be ſaid to apply to a college plan of education, more than to a regimental ſurgeon's. We ſtill hope he has received the elements of his medical education in ſome eſtabliſhed ſeminary of this kind.

Opportunities of this nature will furniſh him with a foundation to proceed on. It will likewiſe enable him to ſelect what is uſeful from what is trifling; and aſſiſt him in ſeparating what may more properly belong to him in his ſituation of an army ſurgeon, from what is foreign to his way of life. He will then be in much leſs danger of ſwallowing

———" without pauſe, or choice,
" The total griſt unſifted, huſks, and all."

"In order to make obſervations himſelf, it will be neceſſary for him to have fixed principles to build upon. He will be capable of diſtinguiſhing diſeaſes only in proportion as he is previouſly acquainted with their hiſtory. Hence the utility and neceſſity of reading."

"A phyſician, who ventures to approach the bedſide of a patient," (and we may apply the obſervation to an army ſurgeon, who fills the place of a phyſician) "without this previous hiſtorical knowledge, can be conſidered only as an uſeleſs and idle ſpectator.

"Happy is the patient whoſe phyſician, with ſuch limited knowledge, is ſufficiently timid, and diffident to remain altogether inactive.

"May it not be aſked, whether Sydenham himſelf did not loſe many patients, from not having derived from the writings of others, by an extenſive reading, many parts of knowledge, which he could acquire only by infinite care and induſtry."

"A phyſician who has not read, will be expoſed conſtantly to fear and uncertainty. His obſervations will be confined within a very narrow circle."

"It

" It is well known how much time is neceſſary for the perfection of any art; whereas reading furniſhes us in a very ſhort time with the diſcoveries of all ages. A ſingle moment is ſufficient to inform us of a great many truths, which were purchaſed by the care and trouble of years."

" A thouſand phyſicians, ſaid Rhazes, have laboured for a thouſand years paſt for the improvement of phyſic, and it is by carefully reading their works, that a man will inform himſelf of more things during a very ſhort life, than he would by running from patient to patent, during a thouſand years."

" Reading makes us familiar with the methods of every time, and every country."

" A man of genius ſoon perceives the modification he is to adopt, when he is about to put the precepts of others in practice."

A regimental practitioner cannot carry a large library about with him, from place to place, from country to country, where his unſettled life leads him. The few books therefore he ſhould peruſe, ought to be principal ones, *i. e.* partly ſyſtematic, and partly ſuch as treat on ſeparate diſeaſes. Every one ſhould poſſeſs

poſſeſs an outline, a general notion of all the diſeaſes incident to the human body. Here Cullen's outlines, now perhaps the beſt as well as moſt faſhionable, may be recommended.—After this, ſuch authors ſhould be had, as have treated of the diſeaſes moſt incident to troops.

The ſcurvy is chiefly obſerved at ſea, and in long voyages; but it is by no means always confined to mariners. We meet with many inſtances of it among ſoldiers. In garriſons, army ſurgeons will meet it. It raged violently in Minorca, during the late war, and was one of the means of enabling our enemies to ſubdue the iſland. And in the war previous to this it raged with conſiderable violence likewiſe among the priſoners at Wincheſter in England.

Lynd has written ſucceſsfully on this diſeaſe. His opportunities of ſeeing it were great, his judgment clear, and his obſervations are always important. But a late author* has taken a more extenſive view of the ſubject, and ſeems to have inveſtigated it with great accuracy, and as it would appear has pointed

* Vide. Trotter on Scurvy, 2d edition.

pointed out better methods of practice than have hitherto been attempted. Lynd's treatise likewise on Hot Climates is an useful work. Sir John Pringle, who spent many years of his life in camps, and among soldiers, has likewise left practitioners in the same line a most valuable book. Here the surgeon will find information on almost every disease that will occur to him in the army. Monro also had good opportunities, and did not let them pass unnoticed. His book on the diseases of the army is an useful performance. The same author wrote on Dropsy, another disease that regimental surgeons will occasionally meet with.

Dysentery has been long noted for raging in camps. Many things indeed concur in the army to give rise to it; particularly if troops be placed for any length of time in a moist, damp situation. The celebrated Zimmerman has treated this disease with much perspicuity and judgment. These, and some others, professedly on such diseases as he has reason to expect among the privates, must form part of his library.

Cullen's Nosology, notwithstanding what some may have thrown out against works of this nature, in my opinion, he will find much

assistance

aſſiſtance from. Here is not only an arrangement, but, what is of more material conſequence, the principal ſymptoms of all diſeaſes. I muſt not omit Le Roy on Prognoſtics in acute diſeaſes. It ſeems to be an uſeful performance.

The venereal diſeaſe is ſo univerſal in the army, that it would be unpardonable not to have ſome of the beſt treatiſes on it. But the authors that have written here are ſo numerous, that it becomes no eaſy taſk to make a choice. Almoſt all of them differ; and almoſt all of them profeſs to differ from their experience of the futility of the methods of their predeceſſors. Such as have written within the laſt twenty years on it, have, however, treated it moſt rationally. Among theſe are Simmons, Andreè, Sweidiar, and ſome others; but I ſhall leave the choice to his own judgment.

The ingenious and indefatigable Mr. Hunter has lately given us a large and ſyſtematic work on it; from which, notwithſtanding the criticiſms it has undergone, he may perhaps find more aſſiſtance than from moſt authors on the ſubject.

Sore

Sore legs will often be met with in the army. He muſt therefore poſſeſs ſome books that treat profeſſedly on ulcers of theſe. Bell, Rowley, and Underwood, are the lateſt, and I believe the beſt on the ſubject. From the frequent colds to which ſoldiers are expoſed, it is no wonder we find catarrhal affections ſo numerous among them. Mudge has written the beſt on the ſubject. An ingenious author, Doctor Beddoes, amongſt other eſſays of importance, has likewiſe favoured us with one on this. His thoughts here, as in moſt other diſeaſes on which he has written, differ from all authors that have gone before him; and, if he be right, other authors muſt conſequently be wrong; for the inſtrument, viz. an inhaler, in which Mudge and others place the greateſt part of the cure, as well as warmth and gentle breathing ſweats, are by him reprobated. The reader will therefore pleaſe to conſult the author on this ſubject, and ſteer between theſe diſcordant opinions as his reaſon may direct him.

This author has turned his attention, however, more to the prevention of the diſorder than to its cure when once it is induced; for I think he would not at that time have recommende-

mended the patient to be removed into the open air, or judge it prudent to place him in a very cool apartment, though he may be of opinion, as I moſt fully am, that great degrees of heat when the diſeaſe is formed, or highly tempered cordials, muſt be pernicious: but there is meaſure in all things; eſt modus in rebus, to uſe a common adage.

I have unqueſtionably found the inhaler of great uſe, and I do not apprehend I deceived myſelf in this reſpect, or attributed virtues to a means of alleviation, where none were to be found. The caſes wherein I have applied this inſtrument with effect, were in ſuch as have been accompanied with inflammation in the fauces and conſiderable tumefaction of the tonſils, with ſoreneſs in ſwallowing and with great cough.

An inflammation of Sneider's membrane, with that lining the fauces, the diſcharge of thin mucus from the noſe which is the conſequence of the former, and the conſtant and tickling cough produced by the latter, muſt be objects of attention, and the cure conſiſts in their removal. Gentle opiates, with plenty of bland fluids, ſeem well adapted to mitigate the one, and reſt, (which a gentle opiate may procure)

procure) will be uſeful in reſtraining the other. The irritability will be leſſened on both theſe ſecreting ſurfaces; the mucus on both will thicken by its remora on the parts, and the diſeaſe, with its accompanying celerity of pulſe will yield. The accumulated irritability, to ſpeak the language of Girtanner and others, a language well ſuited to the idea to be conveyed, induced by the higher degrees of cold, cannot be ſafely removed by the extreme and ſudden expoſure to a large fire and heated apartment, without producing in the ſyſtem proportionable degrees of inflammation. The rules which Doctor Beddoes has laid down on this head, I am convinced are juſt, —and moſt catarrhs, as well as other inflammatory diſorders, might be avoided by obſerving them.

The different inflammatory diſeaſes ariſe from one cauſe, and are chiefly cured by the ſame means; nay, perhaps all inflammations ſpring from accumulated irritability, and they become different in name according to the organ affected; and this or that organ will ſuffer according to the ſtate of its health at the time. That colds and even pneumonic affections are not formed till after expoſure to heat, I

am

am convinced by what has taken place both in my own perſon and in others. I have made this remark for years paſt.

About three years ago I had a ſtrong inſtance of this, which frequently afterwards made me turn my attention to this ſubject.

About the time above ſpecified, a poor young fellow knocked at my door, and introduced himſelf to my notice as having once belonged to the regiment in which I formerly ſerved. I remembered him indeed, both from his ſituation (a drum-boy) in the regiment, and ſome illneſſes he had paſſed through under my direction. Watſon, (this was his name) to ſay the truth, was not among the moſt regular in his behaviour. He had been diſmiſſed at the concluſion of the laſt war, and had ſuffered various viciſſitudes ſince. He applied for charity, eſpecially for ſome old cloaths and ſhoes.

It was now, I think, the end of February; the weather had been for ſome time cold, and that morning in particular was very inclement; it was hail and ſleet. My heart felt diſtreſs at his condition. He had on old thread ſtockings much torn, without ſhoes; neither ſhirt nor waiſtcoat; the tattered coat

t! at hung on him was ſo worn, that his naked body was expoſed through different parts of it: his arms as well as his thighs almoſt totally defenceleſs againſt the piercing cold of the day.—Thus ſtood Watſon before me. He had not long to plead, for in leſs than half an hour I equipped him in a compleat ſuit. The waiſtcoat I gave him was one I had lately worn in cold weather, ſuch as the preſent, when my profeſſion called me much abroad. It was lined with flannel, and was beſides of warm materials. After ſuch expreſſions of gratitude as are common on ſuch occaſions, he went away: but I was not a little mortified two days after, at being told by a neighbour that he was walking about the ſtreets in his old coat, and ſelling his wares, for I had provided him with a ſmall ſtock of needles, pins, ballads, and little books to ſell, towards his ſupport.

Being irritated at this conduct, I made ſearch for, and ſoon found out his place of abode. I enquired what he had done with his cloaths? The fellow's reply was not leſs expreſſive of his feelings, than extraordinary to me.—"If," ſaid he, "your honour ob-
"liges me to wear that waiſtcoat and thoſe
"thick

" thick ſtockings and breeches, I ſhall be a " dead man by to-morrow. Your honour " does not know what I ſuffered the firſt " night, and I have been ill ever ſince." True indeed I found him conſiderably feveriſh, and this accompanied with a ſevere cough : he had pains in his breaſt, and over his body, and in a word, was affected not only with a high degree of catarrh, but with ſome pneumonic inflammation. When I firſt ſaw him, though cold and cheerleſs, yet he had neither cough, pain, nor complaint of any kind, but was in perfect health. The warm clothing, to which he was unaccuſtomed, proved to him a great misfortune, and ſo he conſidered it. A few days after the waiſtcoat was ſeen hanging at the door of an old cloaths-ſhop, where he left it for what it would bring. I am convinced that the difference of temperature between very warm cloaths, and almoſt total nakedneſs, induced immediately the above diſeaſe.

I remember a very ſtriking inſtance in myſelf ſome years ago, where I was expoſed for ſome hours to cold and wet, and immediately after came into a warm room, and ſtood for a conſiderable time before a large fire ; though I

inſtantly changed my cloaths on entering the apartment. My voice became hoarſe in leſs than an hour; in a ſhort time I began to cough; and in a word I ſuffered for near a fortnight with a ſevere catarrh.

In April 1794, I came from London, where I had been on buſineſs a week; the day of my return was wet, windy, and cold, the diſtance I had to travel was ſeventy miles, and I was about eleven hours on the journey. Soon after I came to my own houſe I drank one glaſs of wine, and a little warm milk about a quarter of an hour after, and went to bed. My bed was covered with conſiderably more cloaths than my London bed had been the previous week. I awoke that night in a fever; and contracted ſuch a cough as did not leave me till three weeks after. An inflammation alſo attacked my eyes, which of late have been the weakeſt part of my frame, the conſequences of which I ſeverely felt. When I went to London it was in a night coach, and though the night was extremely bad, and my bed in the metropolis much lighter covered than my own at home, I eſcaped a cold. I went then, as the reader perceives, from a warmer to a colder bed, and

though

though in town the fires were much ſmaller than I uſe at my own houſe, yet no catarrh followed: when I came from a colder into a warmer ſituation, the reverſe was the conſequence. From this I conclude, let the explanation be as it may, that the danger of catarrhs ariſes not ſo much in a tranſition from heat to cold, as from cold to heat. I remember when in the laſt (American) war I lay in camp, though the weather was extremely cold and ſnowy in October and November, we had few or no catarrhs. There were no fires here, nor warmer apartments than the canvas tents, when the men came cold from field-exerciſe or other duty. In winter, and in quarters, we were more ſickly; and I am certain that all inflammatory diſeaſes are oftener found in quarters than in the field. This is a matter well deſerving mature deliberation.

Heated rooms, with warm and ſtimulating drinks ſuch as ſpirituous liquors, &c. after expoſure to much cold, muſt be pernicious. In this ſtate of the body, I mean its cold ſtate, or during its accumulated irritability, a very ſmall ſtimulus has active effects on the habit, whereas large and powerful ones are

dangerous, and ſtimulants ſtill more ſtrong may induce ſudden death. Of this the froſt-bitten limb affords an apt example. A gradual change of temperature is the ſureſt means to eſcape theſe evils.

Soldiers are frequently expoſed to great cold, and many of them, when in towns, find opportunities of taking hot and ſtimulating liquors during this ſtate of body, and even of remaining in warm rooms, provided they have money or credit to gain them admittance to the kitchen of a public-houſe, the warmeſt apartment of every dwelling. Catarrhs are a frequent diſeaſe among them, and are often accompanied with other inflammatory affections. By attending to the above conſiderations they might be avoided.

Doctor Beddoes has written a ſmall tract for the uſe of the poor, called *A guide to ſelf-preſervation*, and at ſo low a price as threepence; it is compoſed in a ſimple and plain ſtile, and might be uſeful to this claſs of men on the very ſubject of which we are ſpeaking. The ſurgeon would find his account in having theſe diſtributed among the privates. It might ſave him both trouble and expence, above the value of the book, were he even at his own

own coſt to give away a certain number to each company. The Doctor's opinion, more fully illuſtrated in other parts of his writings, will no leſs merit the army practitioner's conſideration.

Not only from the nature of a ſoldier's life, but from ill treated catarrhs, we as often meet with phthiſis pulmonalis. To ſoldiers in Britain, the changeable nature of the climate makes this complaint ſtill more frequent. We muſt not omit ſome treatiſes then on this malady. Among many others, Reid and Foart-Simmons have written on the ſubject, and both with ſucceſs. Doctor Beddoes has lately given the world an eſſay on this ſubject, in which much ingenious reaſoning is diſplayed, and which the reader will find advantage in conſulting. In this work he has taken a view of the diſeaſe very different from all authors who have hitherto conſidered it. He ſuppoſes the complaint to ariſe from a ſuperoxyginated ſtate of the body to adopt the language of the new chymiſtry ; and his cure, of courſe, is inſtituted by attempting to remove this. For this purpoſe he lowers the quality of the atmoſpheric air by mixing it with hydrogene. To anſwer this end he has

formed an aparatus by which he is enabled conveniently to lower the atmoſpheric air in the chamber, to the ſtandard which he thinks beſt adapted to his patients cure. But we muſt refer the reader to the treatiſe itſelf for a fuller explanation of this matter; ſince all other methods to cure this dire complaint have hitherto failed, it is certainly allowable to atempt ſomething different to arrive at this wiſhed for end. However new and theoretical therefore his opinions and practice may appear, and however ſevere the cenſures of various critics againſt him may be, we hope this ingenious philoſopher will not be diſmayed, but perſevere till a full and fair trial be given to the ſubject. The beſt and moſt uſeful diſcoveries have ever at firſt met with the ſtrongeſt oppoſition.

Both Small-pox and Meaſles are to be met with in regimental practice, and treatiſes on theſe he likewiſe ſhould poſſeſs.

Among many authors on the former diſeaſe, Dr. Walker has laid before the world a large treatiſe containing many uſeful obſervations, eſpecially on the ſequilæ of this affection, and the method of ſucceſsfully eliminating from the body the dregs of the varioluus

matter.

matter. But as this author has taken conſiderable pains to declaim againſt one of the moſt uſeful improvements which this, or perhaps any other diſeaſe, has ever undergone, viz. inoculation, the reader is cautioned to pay proper attention to his arguments on this head, before he admits them. A gentleman at Alloa has well anſwered this part of Dr. Walker's book; but we ſuppoſe little need be ſaid on a ſubject of which long experience has proved the utility.

I muſt here take the liberty of cautioning the young practitioner againſt ſome errors I have more than once obſerved in the inſertion of the varioluus matter; notwithſtanding it has been practiſed in this country for upwards of ſeventy years, ſome practitioners ſtill perform it in a clumſy and unſcientific manner. A phyſician of undoubted veracity complained to me a few years ago, of an error of this ſort, into which a practitioner fell. The ſubject was a child, whoſe parents were in genteel life, and wiſhing to have it inoculated under the inſpection of the firſt medical men of the place; he, and a principal ſurgeon, long reſident there, were called in. The latter, whoſe province it was to in-

ſert

ſert the matter, made a wound in the infant's arm large enough to contain (as my informer ſays) two large peas. The conſequence was not only a hemorrhage, and a great degree of inflammation, as might be expected, but the infant, from pain and fright, was thrown into convulſions, from which it could ſcarcely be recovered. When my friend remonſtrated againſt this method of practice, he was anſwered by pleading the neceſſity of making a large wound to inſure ſucceſs in the operation. But ſurely when we conſider the ſuperficial courſe of the abſorbents, and their being ſo univerſally diffuſed over the body, we have no reaſon to apprehend that a ſmall inſertion may not expoſe the variolous matter to a ſufficient number of them. It may be pleaded, as an excuſe for this gentleman, that he was an old practitioner, and had, no doubt, often ſeen the method he purſued attended with ſucceſs.

Another error, hitherto too prevalent, is the ſevere abſtinence enjoined during the preparatory ſtage, as it is called. Till lately, even the beſt inoculators carried this plan too far. Sutton, a man of but ſmall medical information, directed it, and all his followers trod in his

his ſteps. It is ſcarcely neceſſary here, perhaps, to point out the dire effects of this plan; it has been univerſally followed by cahexies, and other diſeaſes proceeding from debility, which have rendered the days of the ſufferers both ſhort and miſerable.

It is true, they have got through the diſeaſe with eaſe, and with few puſtules, but the above conſequences have nevertheleſs taken place. An excellent paper on this ſubject may be found in the London Medical Tranſactions, by the late Dr. Chapman.

The method I have generally employed, and which I hope is now pretty univerſal, is as follows: I inſert the matter, and, if thought neceſſary, one or two gentle purges are exhibited in the courſe of the week; but this not univerſally; for ſhould the patient appear of a weak habit, or debilitated by previous diſeaſe, not only this is omitted, but he is allowed, if not ſtrengthening medicines, at leaſt more generous diet. Unleſs in full and groſs habits, I never interdict a moderate ſhare of meat. When the eruptive fever commences, I am careful in moderating it as much as poſſible; by keeping the patient cool, and having his chamber well ventilated;

by

by exhibiting moderate portions of the native vegetable acids in his drink, and, in a word, by the ſtrict antiphlogiſtic plan.—After the eruptive fever, and when the puſtules are thrown on the ſurface, a greater latitude in diet may be allowed, for I have then found it right to ſupport the ſtrength, that the ſuppuration may be duly performed. When this has not been done, the conſequences have been affections of the bowels, both troubleſome and dangerous, but which I have generally been able to remove by warm cordials, in doſes, according to the patient's age and ſtrength. When the puſtules have been numerous, and almoſt running into the confluent kind, much care will be neceſſary during the time of the ſecondary fever, and afterwards. But the rules laid down by the beſt authors on the natural ſmall-pox, are here to be followed, viz. gentle and repeated purging, and aceſſent and antiſeptic food, yet not altogether of a debilitating kind. In this way I have ſucceſsfully treated near two thouſand patients in the courſe of the laſt ten years, in this neighbourhood, without the loſs of a patient, one only excepted, whoſe death will fully prove the neceſſity of the

treatment

treatment above laid down.—This patient, who was about twenty-three years of age, had prepared herſelf in the moſt rigid and abſtemious manner for near a month before ſhe came to be inoculated. The matter was inſerted, at the diſtance of a few days each time, three different times before it produced the deſired effect, and even then it was fourteen days before the eruptive fever commenced; I attributed this to the debilitated ſtate of her habit. She had the diſeaſe in a very formidable manner, but eſcaped, though not without the greateſt attention, till not only the ſecondary fever, but alſo all the puſtules were removed. She now again, by the advice of ſome officious friends, began to purſue her abſtemious plan, and in a very ſhort time ſunk a martyr to the diſeaſe. She had been cautioned, from the beginning, againſt abſtemious living, but my admonitions were not attended to.

He muſt not omit a treatiſe on Anatomy, particularly as diſſections have been recommended, to brighten up his memory, or to refer to occaſionally. Some anatomical plates will likewiſe be neceſſary. Cheſelden's Anatomy, as he is not to enter into the minutiæ, may

may perhaps anſwer. It has ſome uſeful plates; and to theſe may be added, Innes's Tables, or Albinus's, reduced by Bell, an engraver in Edinburgh. Winſlow's Anatomy is the moſt correct, and if he has room he may provide himſelf with it.

The diſcovery of the abſorbent ſyſtem, one of the greateſt ſince that of the circulation of the blood, and not leſs important, or leſs general, in the animal œconomy, has opened a field which the medical practitioner ought not to omit cultivating. By underſtanding the ſituation of theſe veſſels, in the human body, as far as they are yet demonſtrated, he will be the better enabled on many occaſions, to obviate diſeaſe, or remove it when preſent. The beſt work on this ſubject is that lately publiſhed by Mr. Cruikſhanks.

He ſhould next provide a few books on Chemiſtry: Beaumé's Manual, or ſome ſuch. If he can find convenience to carry the Chymical Dictionary of Maquier, ſo much the better, as alſo his Elements. A great variety of celebrated works might be recommended on this uſeful, as well as beautiful ſtudy; but he muſt content himſelf with a few, from the nature

nature of his ſituation, which forbids a large collection.

In the courſe of the laſt ten years, important diſcoveries have been made in this branch of ſcience, inſomuch as to give entirely a new turn to the ſtudy. The former names uſed here have been altogether changed in conſequence of this. From the multiplicity of diſcoveries, indeed, it was neceſſary to form a new language, for the old one was no longer uſeful. Hence ſome ingenious men of diſtinguiſhed eminence in this branch, at the head of whom was M. Lavoiſier, ſet themſelves about forming appropriated terms to expreſs it by. As moſt of theſe diſcoveries were in elaſtic fluids, to which the name *airs* or *gaſes* have been applied, the ſubject in general *is* now ſtiled *pneumatic*, in contradiſtinction to the old chemiſtry.—Lavoiſier's Elements of Chemiſtry, as containing this new nomenclature, cannot be omitted by the ſtudent who wiſhes to become an adept in theſe doctrines. Fourcroy, Bergman, Chaptal, and many others, have given us uſeful performances here, from whom he may obtain all the information neceſſary. If he wiſhes to examine the lately diſputed doctrine of phlogiſton, he may find the

the chief arguments for and againſt it in a ſmall octavo performance, by Dr. Higgins. The moſt eminent chymiſts indeed now, both of this and other countries, have adopted this new language, and became converts to the antiphlogiſtic doctrines.

Nor muſt he omit ſome authors on the Materia Medica. Alſton's and Cullen's are good performances. Among the Diſpenſaries, he may purchaſe Lewis's, the Edinburgh laſt edition, Berkenhaut's, and the London, a new edition of which is daily expected *.

To refreſh his memory, he ſhould have ſome author on general phyſiology. Perhaps Hallers, I mean the ſmall edition by Cullen, will ſuffice; and to this, if poſſible, let him add Morgagni on the Cauſes and Seats of Diſeaſes; it is a moſt uſeful collection. In Dr. Cullen's firſt lines, he will find an excellent account of fevers; but for more particulars, he muſt have recourſe to authors, who have made this their ſole object.

Clarke's Treatiſe on Fevers, among many others that might be mentioned, is, I think, a good performance. Could he find room to carry Van Swieten's Commentaries on Boerhaave's

* This edition has ſeveral years ago been laid before the public.

haave's Aphoriſms with him, he may occaſionally reap much advantage from peruſing it on almoſt every diſeaſe to which the human body is ſubject ; Here again I muſt leave his own judgement to decide.

Warner has written on the Eye ; Ware on Ophthalmia ; both which are good performances.

It will be ſaid, why ſuch a number of books, that comprehend more a courſe of ſtudy adapted for a phyſician than a ſurgeon? This is the very reaſon I recommend them : we all know regimental practice partakes more of the phyſician's than the ſurgeon's province. It is on this very idea I have all along proceeded. We oftener meet with fevers, and other contagious and epidemic diſeaſes among ſoldiers, than ſuch only as need external treatment, and the hand of the operative ſurgeon.

Beſides theſe, which I call more neceſſary, he may purchaſe others as he ſees occaſion. This will form a little, but uſeful library, which it ſhould be the care of the Colonel to order to be carried with the baggage, as punctually as he would the colours of the regiment.

With regard to books on operative ſurgery perhaps Heiſter's and Bell's are the beſt ſyſtematical works; no others need therefore be recommended. Sharp's Operations as far as they go, are allowed to be accurate: Wiſeman's Surgery is a good book: the moſt uſeful of Pott's works ſhould not be omitted: the whole would make a good addition to his military library, if he finds he can remove them eaſily with him on marches. Alanſon has lately written a treatiſe on Amputation; but to take notice of all the authors that may deſerve his attention would lead us too far.

Since ruptures are a diſeaſe which will not permit thoſe afflicted with it to be continued in the army, as the conſtant exerciſe their duty calls them to perform, muſt inevitably obſtruct their cure, and render them always liable to inſurmountable difficulties, I need not recommend books on the ſubject. Both Bell in his ſyſtem, and Pott have, however, treated fully on them; which may be conſulted as convenience ſerves. It is undoubtedly proper that a regimental ſurgeon ſhould be acquainted with the treatment of every diſeaſe which ſurgery comprehends; but it may not be practicable for him to con-

vey

vey from place to place all the books he might otherwiſe think neceſſary on theſe ſubjects. He muſt therefore content himſelf with a few, but theſe few, as we have ſaid, ſhould be well choſen; and the choice in a great meaſure muſt be left to himſelf.

There are many treatiſes on particular ſubjects in ſurgery, ſome of which he may add to his collection, if it be convenient, and his portable library be not already too much ſwelled. Among theſe I may mention O'Halleron on Gangrene; Deaſe on Wounds of the Head; and Ranby on Gun-ſhot Wounds; though it will be ſeldom, in all probability, that caſes of this laſt-mentioned kind will occur, notwithſtanding he practiſes in the army; becauſe battles very rarely happen. Yet this will be no reaſon for his entire neglect of the ſubject; for ſhould only one gun-ſhot wound occur in twenty years, he ought not to be ignorant of the method of treatment.

On this ſubject, however, I meant to deliver my opinion at pretty full length; but I find, by an advertiſement, that there is in the preſs a work on it from ſo able a pen, (the late Mr. Hunter's) as will make the attempt here unneceſſary. From this writer much

may be expected; for no ſubject which ever engaged his attention, did he leave without a full and complete inveſtigation.—From this work then we may naturally expect all that is neceſſary on this head to inſtruct the young practitioner in this branch of his profeſſion.

Since the ſoldiers will frequently call him to viſit their wives, which charity, we hope, will induce him to do; and ſince much of his attendance among them will be with childbed women, he muſt not omit ſome practical treatiſes on midwifery. Smellie's Treatiſe in the octavo edition, may be conveniently carried, to which ſhould be added his plates reduced, to anſwer this edition, and ſold by Elliot of Edinburgh.

He may likewiſe provide himſelf with Hamilton's Treatiſe on the ſame ſubject. Mr. White of Mancheſter has written an uſeful treatiſe on the diſeaſes incident to lying-in women, which he ſhould not omit. And lately the ſame author has obliged the world with a ſmall tract on the ſwelling of the legs, ſo often the conſequence of child-bearing. Though the women of a regiment are not often ſubject to complaints after child-birth,

yet

yet not only this happens among them, but one of a much more dreadful nature; I mean the puerperal fever. Caſes of difficult labour take place ſometimes even here, which reduces their ſtrength, and renders them more obnoxious to thoſe diſeaſes that are the conſequences of weakneſs.

On the puerperal fever, Leak, Hulme, Fothergill, and others have written; he may chuſe which he thinks beſt: the laſt-mentioned author is the lateſt, and he aſſerts, that a cure is at laſt found out for this fatal diſeaſe, from which hitherto ſcarcely ever a woman recovered. It ſeems M. Doulcet, from much practice in the Hotel Dieu in Paris, found that it yielded to gentle vomits often repeated. With reſpect to the ſeat of this diſeaſe, authors are greatly divided: ſome aſſert, that the inteſtines and Omentum are the ſeat of the affection, which they ſay ariſes from an inflammation induced on theſe parts from the preſſure of the womb in the laſt months of geſtation. But I have heard a celebrated anatomiſt in London declare that he has diſſected many who died of it, yet never found an inſtance of inflammation in the Omentum,

while he as conſtantly obſerved it to a great degree in every part of the pelvis.

All poſſible care ſhould be taken to avoid the attack of ſo formidable an enemy to the fair ſex. More may be done as a prophylactic than as a cure when once the diſeaſe is fully formed. For tho' the above medicine ſeems to be held out to the public on good authority and much experience, yet it were ſtill better if the patient was prevented from the danger of an attack. All the expence of theſe few authors on the obſtetric art will be repaid to the ſurgeon, by the pleaſing reflection that he has contributed in every ſituation in which he has been placed, as far as lay in his power, to the general good of his fellow creatures. For with Seneca we ſhould ſay, " Non ut diu vivas curandum eſt, ſed ut ſatis.—Quid illum octoginta anni juvant per inertiam exacti ? Non vixit iſte, ſed in vita moratus eſt."

Soldiers wives ſhould be looked on as the uſeful poor of the regiment, and ought to be conſidered in this ſociety as other poor are in other ſocieties. They ſhould be aſſiſted, and their uſefulneſs promoted ; for they are equally allied to the army, as other poor are to their

reſpective ſocieties, and therefore ought equally to be taken care of. They bring up many uſeful ſoldiers for his Majeſty's ſervice, which is ſtill a farther reaſon not to allow them to be neglected. If the ſurgeon gives them his aſſiſtance in their ſickneſs, it is as much as can be expected on his part. Any other charitable donations of which they may from time to time ſtand in need, ſhould come from a voluntary contribution among the corps. I can by no means conſider them as the leaſt uſeful part of the army; and ſurely our care of them ought to be in proportion: but this ſubject I have treated of elſewhere. *

I am perſuaded that ſome attention of this kind would be the means of more marriages, and leſs uncleanlineſs in the ranks. It appears ſomewhat ſtrange that ſoldiers wives and widows (I do not mean officers) have never been thought worthy the notice of government. Might not ſome ſcheme uſeful to his Majeſty's ſervice, as well as elymoſinary, be formed in favour of the women of the different regiments? Premiums might be granted to the mothers of legitimate children, whoſe

* See "Thoughts ſubmitted to Officers, relative to a regi-
" mental fund for the ſick wives of the ſoldiery."

ſons were born in the army and entered into the ſervice, over and above the common bounty. I offer this only as a hint to be improved on by ſuch as may have it more in their power. I believe it would encourage population; which in the army, in proportion to numbers, comes far ſhort of what it is in other ſituations, and among other claſſes of men. For promiſcuous commerce with proſtitutes, ſo frequent among ſoldiers, prevents it.

Denman has written on difficult Labours, and uterine Hæmorrhages; on the laſt we have alſo a good treatiſe by Rigby. They are both books of ſmall price, and contain uſeful information.

Since electricity has been recommended, ſome books on this ſubject muſt alſo be added to the ſurgeon's collection. Among ſo many treatiſes on it, we are at a loſs what to ſelect. The plaineſt and moſt eaſily comprehended is however the fitteſt for regimental uſe. Tho' if the ſurgeon has been liberally educated, this ſubject will be familiar to him. Among the many books of this kind extant, perhaps that by Cavallo is as plain and

ſimple

ſimple as any. I believe Adams is however the lateſt on the ſubject.* This then, with the ſame author's Medical Electricity, and Prieſtly's hiſtory of the ſubject, may ſuffice. Perhaps the laſt may be diſpenſed with; but if he wiſhes to ſee the progreſs of the ſubject from its firſt diſcovery, this will afford him ample information and ſatisfaction.

To his medical library he will ſtill find advantage in adding periodical publications. Dr. Duncan's Commentaries, and the London Medical Journal, ſtand at the head of theſe in Britain. If it was only for the account of new books, they would afford him ſatisfaction: but they go farther, and admit many uſeful papers, and hints not to be met with elſewhere. In a word, they are an uſeful medical and philoſophical newſpaper, communicating the earlieſt information of the labours of the learned in all parts of the world.

With reſpect to books on mineral waters, theſe may be the leſs uſeful, as ſoldiers can never have the advantage of this medicine, except in the form of fixed air, as already mentioned.

* Since the firſt edition, many other treatiſes on this ſubject have been publiſhed.

mentioned. But tho' mineral waters be never preſcribed by regimental ſurgeons to the privates, they ſometimes are to the officers: and ſince his advice may be aſked concerning their uſe, it is altogether proper he ſhould make himſelf acquainted with the nature of the moſt noted of the mineral ſprings. Officers are often afflicted with chronic diſeaſes from the changes of climate and other viciſſitudes their way of life has ſubjected them to. His knowledge in chymiſtry will apply uſefully here, and enable him to ſolve ſuch queſtions relative to their nature, and probable utility in theſe reſpective caſes of the officers; and he will beſides be able to adviſe which of the watering places to prefer; but the quantity to be taken, and other minutiæ, muſt be left to ſome doctor on the ſpot. Williams has written on the waters of the German Spa; Home on the Dunze; Falconer on the waters of Bath; and ſeveral other authors on the other moſt noted waters: but as a vade mecum, wherein will be found a ſummary account of moſt of the beſt mineral waters of this ſort in Europe, Elliot's treatiſe on them may deſerve a place in his military library.

From

From an acquaintance with botany, the regimental ſurgeon will find more amuſement than uſe; but in this light it deſerves to be cultivated:—Suppoſe this was the ſole advantage to be derived from it, the amuſement is rational, and one of thoſe that will impreſs his mind with a ſtill higher idea of the wiſdom of the Creator. This will appear to him from the great link the vegetable kingdom forms in the chain of created things; the variety and wonderful ſtructure of each individual plant; the various uſes it ſerves, whether in the different arts, or in food and medicine; or whether as a purifier of the atmoſphere that ſurrounds us which is ſo neceſſary for the maintenance of life. This is every moment rendered more impure by animated nature; and without being ſtrained and differently modified in the minute veſſels of vegetables, it muſt in a ſhort time deſtroy "whatever breathes the breath of life." It is ſurely more rational for a man of ſcience thus to amuſe himſelf in his hours of vacation, in his walks of pleaſure, than either angling, fowling, or hunting; tho' exerciſes that are not only pardonable, but perhaps praiſe-worthy in the officer, ſince they brace his nerves, and keep

him

him from idleneſs and criminal diſſipation: but the ſurgeon's duty ranges in a very different ſphere, and in him therefore ſuch amuſements are leſs allowable. "Whatever buſies the mind" ſays the Rambler, "without corrupting it, has at leaſt this uſe, that it reſcues the day from idleneſs; and he that is never idle will not often be vicious."

While I remained in the ſervice this ſtudy was one of my chief amuſements, and one alſo from which I found much pleaſure, and ſome advantage. By this means I never regretted the want of acquaintances, tho' often among ſtrangers. Had I been incapable of finding entertainment from this ſource, I muſt either have often remainded alone, or conſtantly ſought the ſociety of officers; the bad effects of a regimental practitioner's ſpending too much of his time among them, leſt it ſhould alienate his mind from his proper employment, I have already pointed out.

A few books, with a very ſimple apparatus, are ſufficient here. Linnæus's Syſtema Vegetabilium, and if convenient his Spec. Plantar. with ſome eaſy author on the elements of the ſcience, ſuch as Roſe, or Lee's Introduction, will almoſt be ſufficient. He may add a Tranſla-

Tranſlation of Linn. Syſtem. &c. by the Botanical Society at Litchfield, if he chuſes; as alſo Lightfoot's Performance, and Hudſon's Flor. Anglica, both deſcribing the plants of Great Britain. The ſole apparatus that is neceſſary is a ſmall knife, a ſingle lens, and a glover's needle for the purpoſe of diſſection, and examining the ſtructure of the fructification.

During the time he remains in Great Britain or Ireland, as he is more immediately concerned in the plants of thoſe iſlands, he will find the two books that have particularly treated of them moſt uſeful. I omit mentioning others on botany for the ſame reaſon I omitted many in the other ſciences.

The opportunities a regimental ſurgeon poſſeſſes of viſiting, and remaining for ſome length of time in a variety of places and climates, renders it ſtill a fund of greater entertainment and pleaſure to him. We find few places ſituated at any great diſtance from one another, that will not afford ſome plant not common to both. The pleaſure of making any ſuch diſcoveries, will compenſate for the trouble (if it may be called ſuch) of ſearching for them; and ſince botany is now become ſo

faſhionable a ſtudy, that the regimental ſurgeon can ſcarcely enter a town of any note, where he may not find ſome adept in it; in this way alone he will make reſpectable acquaintances, from which may reſult mutual improvement and entertainment to both parties.

It is altogether impoſſible he can make a Hortus ſiccus, he cannot convey a large bulk of dried plants from place to place; but he may make memoranda of the places where he has ſeen the more rare plants, or dry particular ſpecimens for his botanic friends in other parts of the kingdom, &c. which they will thankfully acknowledge.

It is unfortunate for the ſoldiery, that the regimental ſurgeons apply in general ſo little to books. I am ſenſible this reflection is unjuſt if applied indiſcriminately. Several eminent and induſtrious men are now in this ſituation,* and more have been during the late war whoſe ſervices are now ſuperceded by the peace.

In

* Among this number I muſt beg leave to mention Mr. M'Cauſland, of the 74th regiment; this gentleman I have no perſonal acquaintance with, but his ingenious paper in the 8th vol. of the Med. Comm. ſpeaks his merit.

In pointing out the foregoing authors, I do not mean to ſet up my judgement as a ſtandard for others; every one will in a great meaſure be guided by his own taſte. I have omitted many, and thoſe perhaps ſuperior, and more pertinent to the ſituation of army ſurgeons than thoſe referred to; yet I am perſuaded he will find his account in poſſeſſing ſeveral of thoſe pointed out. But of whatever books his library conſiſts, they ought to be on uſeful ſubjects: and ſince he is limited in their number, the greater regard ſhould be had to their quality.

CHAP.

CHAPTER X.

THE UTILITY OF CULTIVATING THE ACQUAINTANCE OF MEDICAL MEN IN THE DIFFERENT QUARTERS; AND THE STUDY OF THE NATURE OF THE SOIL, AND QUALITIES OF THE WATER IN EACH, RECOMMENDED.

THE more we converſe on ſubjects of our profeſſion, the better, as we may reaſonably conclude, we ſhall be inſtructed therein. It is ſo in every mechanical branch; and it muſt alſo be the ſame in a ſcientific profeſſion. A mechanic keeps company with men of the ſame craft, they talk on ſubjects relative to their buſineſs; of different mechanical movements, &c. and new thoughts may occaſionally occur, and improvements be reciprocally ſuggeſted. The merchant attends 'Change, and converſes with his brother merchant on the prices of the different commodities they wiſh either to purchaſe or to vend, and thus information circulates: for according to Ovid,

Congenial paſſions, ſouls together bind,
And every calling mingles with its kind;

Soldier

Soldier unites with ſoldier, ſwain with ſwain;
The mariner with him that roves the main*.

F. Lewis.

As far however as my knowledge reaches this is far from being the caſe in regimental practice. 'Tis true that in the ſociety to which the regimental ſurgeons more immediately belong, there are not perſons of their own profeſſion among whom they might aſſociate. It is not always they meet other regimental ſurgeons. This confines their converſation almoſt conſtantly to the officers of the corps to which they belong. But they ſhould conſider that this is not a place where they can introduce medical ſubjects. If an officer occaſionally turns the diſcourſe to phyſic, the ſurgeon muſt give the ſimpleſt, and moſt obvious anſwer to his queſtions; nor will the ſubject for the moſt part be ever introduced except on their own complaints. Officers would neither liſten to, nor indeed underſtand a more ſcientific detail; and to intrude ſuch converſation on the

* Scilicet ingeniis aliqua eſt concordia junctis,
Et ſervat ſtudii fœdera quiſque ſui
Ruſticus Agricolam, miles fera bella gerentem,
Rectorem dubiæ navita puppis amat.

Ovid.

company at other times might be deemed, and I really believe would deſerve to be conſidered, not only as unpolite, but pedantic. They are not intereſted in ſuch ſubjects, and therefore have no deſire to liſten to medical diſcuſſions. What is it to a man whoſe profeſſion is the ſword, to be told, that ſuch a complaint had ſuch an appearance; and that ſuch a medicine in a ſpecified quantity will produce certain effects; and that particular improvements may reſult from it; and the like? If inſtead of this converſation he relates to the officer the different manœuvres a body of men went thro' on any particular occaſion; how they behaved; in what form drawn up; whether they looked well, and were well clothed; whether they were well diſciplined; and other things of this nature with which they are more immediately acquainted, and connected, they will liſten to him with pleaſure, and thank him for his entertainment. This is natural; they are now acting in the way of their duty, enquiring after uſeful and entertaining anecdotes relative to it. Should not this be an example to the ſurgeon to purſue a ſimilar mode, and ſeek the converſation of thoſe of

of his own profeſſion? "With what ſatisfaction," ſays a learned author, "could the politician lay his ſchemes for the reformation of laws, or his compariſons of different forms of government before the chymiſt, who has never accuſtomed his thoughts to any other objects than ſalt and ſulphur?"—"The higheſt and nobleſt enjoyment of familiar life, the communication of knowledge, and reciprocation of ſentiments muſt always pre-ſuppoſe a diſpoſition to the ſame enquiry, and delight in the ſame diſcoveries."

If the ſurgeon is ambitious of no other company than that of officers, he muſt undoubtedly loſe any taſte he poſſeſſed for medical ſubjects and converſation. When once this inclination, this propenſity for the company of men in the ſame line with himſelf is blunted, it will ſeldom be renewed: nay, in time the degeneracy may be ſo great, that he will feel as aukwardly in the company of medical people, when chance brings him into it, as at firſt he did among the military; and for the ſame reaſon; their converſation will be different from that which he has now been long accuſtomed to. In this caſe

we may apply the words of an eminent author on the ſubject of proper aſſociates for medical men. "It will be right," ſays he, "to avoid the being too often with men of weak heads," (it is not meant to apply this to officers) "the too frequent converſation of theſe people ſometimes brings us down to a level with them, when we are the leaſt aware of it. By thinking with them we inſenſibly accuſtom ourſelves to think as they do.—A bad taſte once become familiar, ſoon becomes the only one we have." Retirement then on many occaſions is a thouſand times preferable to company where he is ſo liable to alienate his mind from ſubjects wherein he is ſo intimately concerned. Retirement in preference he ought undoubtedly to chuſe. Retirement is no bondage to a man of a contemplative turn of mind: on the contrary, it is agreeable. Moſt men at particular times ſeek retirement, and are happieſt when alone. A man really enjoys ſociety the better for being ſometimes abſent from it. He is ſurely to be pitied who muſt depend always on others for his happineſs, or entertainment. Happineſs is enjoyed to the greateſt perfection, where the chief ſource of it centres

tres in a man's own breaſt. I have already pointed out the way in which he may occupy part of his leiſure hours; yet there is no need of continually flying from the company of the corps: it is enough if it be only moderatedly ſought; if he divides his time properly between their company, and the company of himſelf. It was on this plea I ventured it as my opinion in a former part of theſe remarks, that the ſurgeon ought not to dine conſtantly at the Meſs.

How many young men have made early ſhipwreck of their underſtandings on this very point? An early introduction into company, where the paſſions find no controul and the bias to diſſipation, inſtead of being reſtrained is encouraged, has ſoon blunted the edge of acuteneſs, and left either a rake, a ſot, or a glutton, where nature had planted genius and education; and foſtered wiſdom and penetration. For as an eminent author juſtly ſays, "Long intervals of pleaſure diſſipate attention, and weaken conſtancy: nor is it eaſy for him that has ſunk from diligence into ſloth to rouſe out of his lethargy, to recollect his notions, rekindle his curioſity, and en-

gage with his former ardour in the toils of ſtudy."

This leads me to the recommendation of the company of medical gentlemen to regimental ſurgeons in the different towns where they are quartered. Here they may be both entertained and improved; at leaſt their converſation will lean towards topics, which in a great meaſure relate to their proper line of life. Caſes of patients will be related, queſtions in medicine ſtarted, from the diſcuſſion of which, both parties may be gainers, and ſome little addition made to the ſtock of their knowledge. This ſtrengthens the mind, and confirms, (if I may be allowed the expreſſion) the habit of well doing. "It is," ſays an ingenious author *, "by right and regular exerciſe, that our intellectual, as well as corporeal endowments, in general, acquire any ſort of readineſs and activity."—Or, as Lord Verulam expreſſes it, [ſpeaking of logic] "Non ſolum dirigunt, eam (Scil. mentem) ſed et roborant; ſicut Sagittandi uſus et habitus non tantum

* Letters concerning Education to a Gentleman entering the Univerſity, p. 146.

tum facit, ut melius quis collimet, ſed ut arcum tendat fortiorem *.

Experience has taught me the utility of what I here recommend. During the time I ſerved in the army, my firſt care on coming into new quarters always was, to enquire into the characters of the medical gentlemen of the place, and in what eſtimation their profeſſional abilities were held. I ſoon after found means of introduction to ſuch as I underſtood to be moſt eminent in their buſineſs, and moſt eſteemed in the town. This indeed proved one of my greateſt ſources of happineſs during my ſervice. In this way I formed ſeveral connections that I ſhall ever reflect on with pleaſure, and whoſe acquaintance will ever do me honour. Here I had a farther advantage; a compariſon of the ſituation, diſeaſes, and healthineſs of a variety of places with one another.

And ſince I have touched on this ſubject, allow me to add, that a regimental ſurgeon ſhould make this his firſt and peculiar care on change of quarters. This is a matter of no little moment to him, as he will not now be taken by ſurprize, when the diſeaſes incident

* De Augment. Scient v. i.

to the place, or then epidemic in it, appear among the ſoldiers. He has received, we ſhall ſuppoſe, ſuch information from the practitioners ſettled there, as may in ſome meaſure enable him to obviate part of the evil impending; while he adopts thoſe remedies, when it does appear, which their experience have taught them to be moſt ſucceſsful in ſimilar circumſtances, or he improves them by his own ſagacity. This is material information, and perhaps may ſave the lives of ſome of his patients.

Here he muſt alſo remember that places at no great diſtance from one another may differ greatly in reſpect to healthineſs. One may not only be ſubject to more frequent diſeaſe than the other, but alſo to ſome particular one, which may properly be called the endemic of the place. I have known this fact in places at no greater diſtance than two miles and a half; nay half a mile, and it may be even leſs; however incredible it may appear to perſons unacquainted with ſuch ſituations.

The diſtance between the villages of Wheathamſtead * and Harpenden, is only two miles and a half. The latter is on a much drier

* Bedfordſhire, and the borders of Hertfordſhire.

drier foundation, as well as a more elevated ſituation than the former; and as experience ſhows, much leſs ſubject to intermittents, the fever of the ſoil. Wheathamſtead is built on a very low ground, in a ſort of dell; and through it runs a ſmall river whoſe banks, for many miles, are ſo flat that the water overflows them, and in wet weather forms a marſh ſpreading conſiderably on both ſides. It is thickly ſurrounded with wood to a great diſtance round, as is the whole country. Not only intermittents are more frequent here than at Harpenden, though ſo contiguous, but likewiſe putrid diſeaſes; and when they appear they rage with ſeverity. There is indeed ſcarcely a town of any extent to which the ſame remark will not apply; and in the ſpace of leſs than half a mile we ſhall often find one part of a town, or even ſtreet more ſubject to ſickneſs and certain diſeaſes than another. Soldiers are very much confined to a particular ſpot: if they be found more than a mile from their billets, without a paſs, they are liable to be taken up for deſerters. Their confinement may render them more ſubject to the endemic, as well as epidemic of the place.

During

During the ſpring of 1782, I had an opportunity of ſeeing this remark concerning the different degrees of healthfulneſs of contiguous places verified. A putrid fever and ſore throat took place in Wheathamſtead, and exerted its violence chiefly among puerile and infantile ſubjects; though ſome few adults were likewiſe ſufferers. When it proved fatal, it was generally in a few days. The uncommon wetneſs of the ſeaſon joined to the natural moiſture that is retained in the ſoil here, where copious miaſmata are always exhaling, laid the foundation of the diſeaſe.

No complaint of this kind appeared at Harpenden, though the diſtance be only what we have mentioned; and from this known difference in the two places, there was little reaſon to apprehend it. A ſurgeon at Luton, which is about ſeven miles from it, who attended a patient ill of it there of about ſix years of age, whom I viſited with him, and who ſoon after died, agreed with me in opinion, that the reſt of the children of the family * ſhould be inſtantly removed to this village, not doubting from the nature of the ſoil,

* Son of the Rev. Mr. Wheldon, Rector of the pariſh, &c.

ſoil, but they would eſcape it there. The event verified our opinion.

In like manner St. Albans and Luton are but ten miles aſunder; yet the latter is far more ſubject to intermittents than the former, becauſe it is alſo much ſhaded with wood, lies very low, and has the river above-mentioned running through it, cauſing much ſtagnating water near its banks. The ſame may be ſaid of Redburn and St. Albans, which are only four miles and a half diſtant from each other.

Great Yarmouth, in Norfolk, and the village of Gorleſtone, in Suffolk, are only two miles diſtant, and in a ſtraight line acroſs the river ſcarcely one; yet there is conſiderable difference in the healthineſs of the two places. Yarmouth lies lower by many feet, and on a flat, once a ſand bank, ſtill preſerving its level form; and though the foundation is ſandy, and the ſwarth looſe and light, the water lies at no great diſtance from the ſurface. This was proved from a well dug on the ſame level, on the oppoſite ſide of the river, below the beach on which Gorleſtone ſtands; and is farther proved from the ſeveral

pieces

pieces of water that conſtantly ſtagnate round Yarmouth.

Beſides, Gorleſtone is almoſt entirely free from thoſe fogs in which Yarmouth is ſo frequently envelloped. I have ſeen a fog ſo thick cover the town from the ſea in a few minutes, as well as from the marſhes on the weſt of it, that an object at twenty yards diſtance could ſcarcely be diſtinguiſhed; while a very great alteration at the ſame time took place in the heat of the atmoſphere. In an hour or two theſe would again diſappear, and the ſun ſhine forth. This viciſſitude of weather would perhaps be repeated once, twice, or oftener in the courſe of a day. The elevated ſituation of Gorleſtone preſerves it from ſuch ſudden changes of atmoſphere. Gorleſtone is ſituated weſt of both ſea and river; Yarmouth between them; the piece of ground on which Yarmouth ſtands being by this means almoſt a peninſula; the river running parallel with the ſea for between two and three miles before it falls into it, forming a tongue of land not more than from a quarter to half a mile in its broadeſt part.

Two miles farther ſouth than Gorleſtone, on the common of Hopton, the ſoil is even

more dry and light, with much heath; the ſituation is alſo ſtill more elevated above the ſea, and the water at a conſiderable diſtance from the ſurface. This was proved by wells dug for the uſe of the camps formed there in 1781 and 1782. They were obliged to penetrate deep before they found water. The ſummer of 1782 was remarkably wet; yet no diſeaſes proceeding from moiſture or miaſmata took place among the troops. There was not a fever of any kind during the encampment; nay even ſome affected with chronic complaints now recovered from them in a great meaſure. This was the caſe with an officer long labouring under an affection of the lungs.

The ſame obſervation may be made reſpecting Loweſtoft, which is ſix miles ſouth from Hopton common, and along the ſame coaſt. It is likewiſe elevated conſiderably above the level of the ſea, and is not immediately ſurrounded with wood. There is a large lake ſouth-weſt of the town, about two miles; but I have not found its exhalations produce any ſenſible effects on the health of the inhabitants. I ſpent eleven months along this coaſt from Loweſtoft to Yarmouth; and had time

time in this period to form ſome obſervations. The difference of theſe elevated ſituations, and the low ſituation of Yarmouth appeared ſtill farther by the greater number of ſick while the ſoldiers lay in it, than what was experienced on Hopton common the preceding ſummer.

Theſe examples might ſuffice to ſhow, that places at ſmall diſtances may differ greatly in reſpect to healthineſs; but we ſhall add one more as a farther illuſtration. The city of Lincoln is partly built on a high hill, and partly in a low vale. This produces very great difference with reſpect to the ſoil and health of the inhabitants. Cloſe on the town is a large lake; and a little weſt, at the diſtance of a field reſembling meadow, marſhy and ſcarcely to be travelled unleſs in dry weather, is another ſtill larger, called Swan Pool. But in winter and in wet weather, the whole country round, almoſt as far as the eye can reach, is almoſt an univerſal lake. From the high to the low town it is little more than a quarter of a mile; for the mountain on which part of the town ſtands riſes abruptly. Yet the difference is ſo great, that it is cuſtomary for the medical gentlemen there to ſend

their

their patients from the low to the high part for their recovery. The endemics of the place, *i. e.* intermittents, and remittents, are both more frequent, and more obſtinate in the low than in the high town. This has been long obſerved by the faculty there. And on this obſervation being made to the commanding officer when I lay in it, he very prudently improved by the hint, and ordered a frequent change of quarters among the privates, from the high to the low town, and vice verſa, to prevent any diſeaſe that by a longer continuance in the marſhy part of the town the ſoldiers might be liable to contract.

I have dwelt perhaps too long on this ſubject, and needleſsly multiplied my illuſtrations; but it was with the deſign of more ſtrongly enforcing the neceſſity of the regimental ſurgeon's application to the ſtudy of the ſoil in their different quarters; a ſpecies of knowledge more peculiarly proper for him, as the ſoldiers from their frequent change of quarters are more particularly liable to ſuffer from the effect of unhealthy ſituations. This knowledge, it is ſuperfluous to tell them, they will obtain ſpeedily from

an

an acquaintance with the medical gentlemen of the place; though their own obſervation muſt unite, for the better conviction of the truth they receive; as a man may always rely more on the fidelity of his own obſervations than on others.

Before I quit the ſubject, I ſhall juſt hint at another example, and yet perhaps one that is not ſo forcible as ſome of thoſe we have given. In Ipſwich, the capital of Suffolk, there is likewiſe a variety in the ſituation, though leſs than ſome of thoſe places already mentioned, which produces ſome variety in the healthineſs of its different parts. Corn-hill, St. Matthew's-Street, and a few others in the vicinity of the market-place, being conſiderably more elevated than the eaſt and ſouth-eaſt parts of the town, have a freer circulation of air, and are leſs ſubject to intermittents and other fevers; which, though this is by no means a ſickly town, but rather the reverſe, frequently attack the poor in the lower parts, namely in St. Clement's-Street, the Common Quay-Street, the Upper and Lower Waſhes, as they are called, thoſe parts of St. Helen's contiguous, and the cloſe narrow ſtreets or lanes in ſeveral other parts of the

the town, of which there is a conſiderable number.

The water is remarkably pure in the higher parts, which may among other things, contribute ſomewhat to the leſs frequent appearance of diſeaſe there. From ſome late trials, and a compariſon made between it, and that which ſerves the lower parts, it is found remarkably purer.

St. Clement's-ſtreet runs alſo parallel to, and cloſe by the river Orwell, the ooze of which appears above the ſurface; and indeed the whole bed of the river, which is of conſiderable breadth, is left nearly dry for almoſt two miles in its extent, on every ebbing of the tide, except in its channel, conſiſting only of a ſmall winding ſtream in the middle, the ſhipping being left faſt in the mud till the return of the tide.

From this copious miaſmata muſt be exhaled, which cannot fail to debilitate, and prediſpoſe the inhabitants near it to fevers of different types, more frequently than in the higher parts of the town, where theſe noxious effluvia ariſing from the ooze do not reach. Let any perſon walk along the banks of the river for ſome way during the abſence

of the water, and the diſagreeable putrid ſmell from the mud will ſufficiently convince him, that the air around muſt be greatly tainted; yet the diſtance of the low part of the town from the higher, does not exceed half a mile.

The next thing a regimental ſurgeon ſhould have in view is the nature of the water in his new quarters: a great deal may depend in preſerving health, on the quality of this neceſſary article of life. Changes in the water may produce diſeaſes independent of other auxiliaries; and if he be not watchful in this reſpect, he may be conſiderably puzzled to find the cauſe, and to apply a cure.

When a regiment in which I ſerved ſome years, marched from Newcaſtle on Tyne to the barracks at Tynemouth, in June 1781, only nine miles diſtant, a diarrhœa appeared among the ſoldiers a few days after, which proved both troubleſome and obſtinate for ſome weeks. I attributed the cauſe, after ſome reflection, to the water of the place; and on adviſing them to be as ſparing as poſſible of its uſe in drinking, the complaint ſoon diſappeared. The water there is hard, and curdles ſoap, owing to the different mineral

ſubſtances with which the neighbourhood abounds. The whole country for many miles round may be ſaid to conſiſt of pit-coal, and other minerals, ſuch as pyrites, wherein the vitriolic acid prevails much. While the regiment remained in Newcaſtle, no complaint of this ſort appeared; though the water there is equally, if not more loaded with mineral particles. The reaſon ſeemed to be the uſe of ſmall beer, which the men received from the publicans on whom they were billeted. On going into barracks this allowance ceaſed, and they now were obliged to drink water where they drank beer before. This affected their bowels, partly from want of uſe in drinking it, and partly from the nature of the water itſelf.

On the ſucceeding February I was ſtill farther confirmed in the truth of this obſervation; for on the 26th regiment going into the barracks and relieving ours, the very ſame malady befel them. Mr. Millar, their ſurgeon, conſulted me on the occaſion, having been left behind in ſick quarters, and I gave it as my opinion, that the fault was in the water, and gave him at the ſame time, a relation of what had happened to my patients

the preceding ſummer. Of courſe, he very judiciouſly ordered his hoſpital to be ſupplied with milk; and cautioned the men to be ſparing in their uſe of water; but in ſo ſmall a village, it was impoſſible to procure milk for the whole regiment, though they were not above one third ſo ſtrong as ours.

There remains ſtill another reaſon why the regimental ſurgeon ſhould cultivate the acquaintance of medical people where he is quartered. From the great trouble and inconvenience there is in tranſporting a large library from place to place, he cannot be ſupplied with many books that would otherwiſe be neceſſary for him. His library muſt therefore be very circumſcribed, as already pointed out. For though he ſhould poſſeſs all the books we have mentioned as proper for his peruſal, yet they will form but a very contracted library, particularly for a man who wiſhes to paſs ſeveral of his hours daily in reading.

The acquaintance and friendſhip of the ſettled practitioners will ſupply this defect. He will have the uſe of their libraries if his behaviour be ſuch as command civility, or deſerves their friendſhip: and they will be

the readier to oblige him, as he does not come among them a rival in the profeſſion. He will find this of no ſmall advantage. The defect of his own ſcanty collection will in this manner be well ſupplied. There are few ſurgeons or phyſicians who are at any time eſtabliſhed in a place that have not a conſiderable variety of books. Beſides, if there are any extenſive bookſellers in the place where he lies, he ſhould agree with them for leave to read, provided they have a good aſſortment of thoſe medical, philoſophical, and other works which he wiſhes to peruſe.

And moreover, as difficult caſes in practice will occaſionally occur, he can now have the advice and aſſiſtance of ſome of the medical gentlemen whoſe friendſhip he has procured. It is ſeldom a regimental ſurgeon is placed near other regimental ſurgeons to take their advice, ſuppoſing them well qualified to give it. He is always moſt among ſettled practitioners: nor is this one of the leaſt reaſons why he ſhould form connections among the medical brethren of the place in which he reſides.

To

To conclude, the more a medical man converſes with medical men, or men of ſcience, the more will be his opportunities of receiving information, and his emulation will be thereby kept alive. A regimental ſurgeon may have many ſuch opportunities, from the variety of places he goes to, which muſt always afford him a greater variety of ſuch aſſociates, provided he takes a proper method to be introduced, and is inquiſitive on ſuch ſubjects.

END OF THE FIRST VOLUME.

ERRATA

VOL. I.

CHAP. I. p. 2. l. 2. after *ſervice* read (,)—l. 6. for *other* read *one*

CHAP. II. p. 11. l. 5, after *few* read (;)— p. 30. l. laſt, for *in* read *into*—p. 38. l. laſt for *as* read *for*—p. 46. l. 6. from bottom for *He* read *The Surgeon*,—p. 53. l. laſt, for *whea* read *wheat*—p. 64. l. 17. after *fornication* add (;)—p. 67. l. 2. for *ſo* read *in this manner*.—p. 69. l. 3. from bottom, for *ſkin* read *ſhin*

CHAP. IV. p. 112. l. 2d. from the bottom, after *on* add *of* p. 119. l. 12. after *properly* add (.)—p. 122. l. 8. for *dical* read *medical*—p. 122. l. 8. from bottom, after *attention* add *ſhould*, and for *finds* read *find*

CHAP. V. p. 128, l. 7. from bottom after *ſtate of* add *the want of*—p. 136. l. 7. for *accoucher*—read *accoucheur*

CHAP. VI. p. 154. l. 11. for *ſo* read *ſo*—p. 171. l. 12. from bottom, after *ſuffocation* dele (.) and after *minutes*, add (.)

CHAP. VII. p. 191. l. 13. for *coagulate* read *coagulable*.—p. 193. l. 11. for *young's* read *young*

CHAP. IX. p. 280. l. 6. after *matter*; read (.)—do. l. 3. from bottom, for *ſequilæ* read *ſequelæ*

CHAP. X. p. 324. l. 2. from bottom, before *command* add *to*—p. 325. l. 6. for *at* read *for*

DIRECTIONS TO THE BINDER.

Inhaling Tube—plate, to be placed before p. 219—of Vol. I.
Tourniquett plate, before p. 225—of Vol. I.
The explanation of the plate to be placed next it.